UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
STACKS

Digitized by the Internet Archive
in 2013

http://archive.org/details/summersession19621967univ

C
IZs1Ia
1962
~~Copy 2~~

THE LIBRARY OF THE
MAY 7 1962
UNIVERSITY OF ILLINOIS

JUNE 18 TO AUGUST 11

1962

SUMMER COURSES

BULLETIN · UNIVERSITY OF ILLINOIS · URBANA DEPARTMENTS

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

DEC 22 1975

DEC 1 1975

L161—O-1096

UNIVERSITY OF ILLINOIS BULLETIN

Volume 59, Number 64; March, 1962. Published nine times each month by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the act of August 24, 1912. Office of Publication, 49 Administration Building (West), Urbana, Illinois.

CONTENTS

Calendar....4
General Information....5
Physical Examination....5
Admission and Readmission....5
Registration....7
Fees....9
Financial Aids....9
Final Examinations....9
Student Welfare....11
Room and Board....11
Illini Union....11
Listing of Courses....12
Accountancy....13
Advertising....14
Aeronautical and Astronautical Engineering....15
Agricultural Economics....15
Agricultural Engineering....16
Agriculture....18
Agronomy....18
Animal Nutrition....19
Animal Science....19
Anthropology....20
Architecture....21
Art....22
Astronomy....28
Aviation....29
Bands....32
Biophysics....32
Botany....32
Business....34
Business Administration....34
Business Education....34
Business English....124
Business Law....35
Ceramic Engineering....36
Chemical Engineering....41
Chemistry....37
Civil Engineering....42
Communications....44
Dairy Science....45
Dairy Technology....68
Division of General Studies....45
Economics....46
Education....48
Electrical Engineering....57
English....60
English for Foreign Students....123
Entomology....65
Finance....66
Food Technology....68
Forestry....68
French....69
General Engineering....71
Geography....72
Geology....74
German....75
Greek....77
Health Education....78
History....78
Home Economics....80
Horticulture....82
Hygiene....83
Industrial Education....83
Italian....84
Journalism....84
Labor and Industrial Relations....85
Latin....86
Latin-American Studies....127
Law....86
Library Science....88
Linguistics....90
Management....91
Marketing....92
Mathematics....94
Mechanical Engineering....98
Metallurgical Engineering....99
Microbiology....100
Mining Engineering....100
Music....101
Nuclear Engineering....108
Philosophy....109
Physical Education....112
Physical Education for Men....111
Physical Education for Women....112
Physics....113
Physiology....115
Plant Pathology....116
Political Science....116
Portuguese....118
Psychology....118
Radio and Television....120
Recreation....121
Rhetoric and Composition....122
Rural Sociology....16
Russian....125
Russian Language and Area Studies....130
Safety Education....127
Social Sciences....127
Social Work....132
Sociology....132
Spanish....134
Speech and Theatre....136
Theoretical and Applied Mechanics....139
Veterinary Medical Science....140
Zoology....141

CALENDAR

May 23, Wed.-May 25, Fri.	Preregistration of student registration staff and graduate students registered in second semester 1961-62.
June 4, Mon., 4:10 p.m.	Meeting of Urbana-Champaign Senate.
June 5, Tues.-June 8, Fri.	Entrance examinations (to remove deficiencies in entrance requirements).
June 18, Mon.	Registration of graduate students not registered in second semester, and undergraduate students.
June 19, Tues.	Earliest date for special examinations.
June 19, Tues., 7:00 a.m.	Instruction begins.
June 19, Tues., 7:00-10:00 p.m.	Qualifying examination in English (for transfer students with eighty or more credit hours only).
June 20, Wed.	Meeting of Board of Trustees.
June 25, Mon., 5:00 p.m.	Latest date for full rebate of tuition and fees if withdrawing from the University or reducing schedule below Range I.
July 4, Wed.	Independence Day (holiday).
July 16, Mon.	Beginning of second four-week courses.
July 16, Mon., 5:00 p.m.	Latest date for rebate of one-half of tuition and fees if withdrawing from the University.
July 17, Tues.	Earliest date for one-half credit if withdrawing from the University for military service (four weeks completed).
July 18, Wed.	Meeting of the Board of Trustees.
July 19, Thurs., 7:00-10:00 p.m.	Qualifying examination in English.
July 27, Fri.	Latest date to withdraw from the University without petitioning for readmission.
July 30, Mon.	Latest date for special examinations.
July 31, Tues.	Earliest date for full credit if withdrawing from the University for military service (six weeks completed).
August 8, Wed.	Last day of instruction.
August 9, Thurs.	Study Day (classes dismissed).
August 10, Fri.-August 11, Sat.	Summer Session final examinations.
August 13, Mon.-September 8, Sat.	Corps of Engineers post-Summer Session courses.
August 22, Wed.	Earliest date for special examinations.

GENERAL INFORMATION

To serve those who desire to pursue summer study, the University of Illinois at Urbana is offering a comprehensive schedule of courses of eight weeks duration, June 18 to August 11, 1962. A few departments are offering special intensive courses lasting only four to six weeks. All colleges on the Urbana campus are included in the summer program.

The University of Illinois Undergraduate Division at Chicago also is offering courses for eight weeks from June 22 to August 17, 1962.

Courses in the eight-week Summer Session are selected to meet the needs of school teachers and administrators, librarians, athletic coaches, and others whose employment prevents attendance during the regular school year, as well as graduate students pursuing work leading to advanced degrees, undergraduate students at the University of Illinois or elsewhere who wish to accelerate their programs of study, and other persons for whom summer study will contribute to vocational or personal goals. The needs of teachers are met not only in the courses and workshops in the College of Education, but also in a variety of courses elsewhere in the University.

Undergraduate and graduate students interested in taking independent study courses (reading and research) should confer with the head of the department concerned.

The resources of the University are open to students throughout the summer. They may take advantage of the extensive facilities of the University Library, the largest in any state university and third among all American universities, with more than four million books, films, pamphlets, music scores and parts, maps, manuscripts, and approximately 18,000 periodicals and newspapers. They may profit from the museums, collections, shops, and laboratories. There are programs of cultural and recreational opportunities — lectures, readings, concerts, theater productions, dances, and social events.

General information concerning admission, registration procedures, fees, and board and room is given below. The courses offered in the eight-week Summer Session are listed alphabetically beginning on page 13.

PHYSICAL EXAMINATION

All new students proposing to enroll in the University of Illinois at Urbana-Champaign, except those transferring from the professional campus or the Undergraduate Division in Chicago, are required, before completion of their first registration, to present adequate evidence of satisfactory physical and mental health as determined by the Director of Health Services.

The pre-entrance examination, except for foreign students, may be performed at the student's expense by a properly qualified doctor of medicine of his choice or by the Health Service free of charge until fifteen days prior to the registration date for the particular semester or summer session. It must be performed within the six-month period immediately preceding the registration date and is subject to final evaluation and approval by the Director of Health Services. Detailed explanatory material and medical forms for reporting the pre-entrance examination are forwarded to each student who receives a permit to enter.

Students arriving on campus on or after June 4, 1962, without a completed physical examination recorded on the Health Service form, except foreign students, will be required to have a pre-entrance physical examination performed at their own expense by a physician of their own choice.

The required tuberculin skin test is conducted by the Health Service without charge as a part of the registration process.

ADMISSION AND READMISSION

Admission as Candidates for Degrees

All students, *graduate and undergraduate,* not previously enrolled at the University of Illinois who are planning to register for the first time this summer

should submit applications for admission to the Dean of Admissions and Records well in advance of June 18, 1962. Application blanks may be obtained by writing to the Office of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois. Undergraduate application blanks are available also in the offices of high school principals.

Undergraduate students who wish to transfer to the University from another college or university should submit as early as possible the completed application for admission. In addition, if the applicant is to be a candidate for a degree, official high school and college transcripts of record must be sent directly from each institution previously attended.

Candidates for advanced degrees who were registered in the Graduate College for resident study, or in extramural courses as degree candidates, in the 1961 Summer Session or in the first or second semester of 1961-62, *need not apply for readmission to the Summer Session.*

Other former graduate students, and undergraduate students not in attendance the second semester of 1961-62, who expect to return this summer, should file applications for readmission well in advance of registration in order to allow ample time for preparation of registration materials. This will facilitate the entire procedure for each student concerned and avoid unnecessary delay in completing his registration. Those who have not notified the Dean of Admissions and Records in advance of registration day of their intentions to re-enter, and new students who have not received a permit to enter, should go first to the Office of Admissions and Records. Undergraduate students report to 100a Administration Building; graduate students report to 158 Administration Building (West). *They may go there at any time without respect to the alphabetical order of registration on pages 7 and 8.*

For additional information on any matter concerning admission, write to the Dean of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois.

Admission of New Undergraduate Students as Candidates for Degrees

Application for admission to the 1962 Summer Session from new undergraduates, as candidates for degrees, whose credentials show that they have met the requirements of the requested curriculum as published in the University Undergraduate Study catalog, are considered as indicated below.

RESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper three-fourths of their high school graduating classes.
2. *Freshmen* who rank in the lowest quarter of their high school graduating classes who present one of the following evidences of ability to do satisfactory work at the University:
   a. A passing score on a test, or tests, as prescribed by the All-University Committee on Admissions. (Either the ACT or the SAT of the CEEB have been approved for this purpose.)
   b. Evidence of having attempted twelve or more semester hours of work at another college or university of recognized standing, and meeting the regular University requirements for admission as a transfer student.
   c. Applying for admission to a session which begins at least twelve months after graduation from high school, provided that (1) in this twelve-month period the applicant has not attempted as much as twelve semester hours of work at another college or university of recognized standing, and (2) he meets all other University requirements for admission that are applicable to him. In such cases, he is not required to take the test, or tests, prescribed in (a) above.
3. *Transfers* who satisfy the scholastic and other requirements specified in the Undergraduate Study catalog.

NONRESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper 50 per cent of their high school graduating classes.
2. *Transfers* whose scholastic averages are at least 3.0 (C).

Admission and Readmission as Non-Degree Candidates

Applications of undergraduate students for admission or readmission to the Summer Session, not as candidates for degrees, should be submitted to the Office of Admissions and Records well in advance of registration day. They may be approved under one of the following conditions:

1. Former students who were eligible for readmission when they left the University may register in the summer upon approval of the Dean of Admissions and Records.
2. Transfer students who present a statement of eligibility to return to the collegiate institution last attended.
3. Persons employed as teachers who submit statements from the school authorities attesting to their employment.
4. Others, twenty-one or more years of age, who give evidence that they possess the requisite background and ability to pursue profitably summer courses for which they are qualified. They must receive the approval of the Dean of Admissions and Records.

Students admitted to the Summer Session as non-degree candidates who later wish to enter one of the colleges of the University as degree candidates must seek admission at that time in the usual manner from the Office of Admissions and Records.

REGISTRATION

Eight-Week Courses

Monday, June 18, through Saturday, August 11, 1962

No course may be taken for graduate credit unless it is so designated in this Time Table of courses offered. The normal credit which a graduate student can earn in eight weeks is two units. In exceptional cases two and one-half units may be carried with the approval of the adviser. Under no circumstances is a student permitted to carry more than two and one-half units.

Further information concerning the regulations for advanced degrees is contained in the catalog of the Graduate College, copies of which may be obtained by writing to the Dean of Admissions and Records, 100a Administration Building, or the Dean of the Graduate College, 207 Administration Building (East).

PREREGISTRATION

Wednesday, May 23, through Friday, May 25, 1962

Graduate Students

(Registered on the Urbana campus for the second semester of 1961-62)

Such students should register according to the schedule below. Those not completing their registration during this period *may not register until the time designated in the late registration schedule below.* Program cards and other preliminary registration materials may be obtained from the department offices on or after Wednesday, May 16. Authorization cards to complete registration will be available at the Graduate College Office May 23 through May 25, according to the following schedule:

A through C.....Friday, May 25, 8:00 to 12:00 noon
D through G.....Friday, May 25, 1:00 to 5:00 p.m.
H through K.....Thursday, May 24, 1:00 to 5:00 p.m.
L through O.....Wednesday, May 23, 1:00 to 5:00 p.m.
P through Sj.....Thursday, May 24, 8:00 to 12:00 noon
Sk through Z.....Wednesday, May 23, 8:00 to 12:00 noon

Teachers commuting to the campus who are unable to be here during the period designated above are permitted to register on Monday, June 18, 1962.

Undergraduate Students

Wednesday, May 23, through Friday, May 25, 1962

Undergraduate students employed in registration duties (*special permit required*).

REGULAR REGISTRATION

Monday, June 18, 1962

Graduate Students

(*Not* registered on the Urbana campus for the second semester of 1961-62)

The program card and other preliminary registration materials may be obtained in advance of registration day at the department offices on or after Tuesday, June 12. After the preliminary materials have been completed in consultation with the adviser, authorization cards for registration will be distributed in 259 English Building, in accordance with the schedule listed below, *but not before.*

Undergraduate Students

Both new and former Summer Session students not assigned to a college will receive registration forms at the Information Table located inside the northeast entrance of the Armory; other undergraduate students receive registration materials at the offices of the deans of their colleges. Authorization cards to complete registration are released in accordance with the schedule listed below.

Graduate and Undergraduate Students

Nonacademic employees (*special permit required*)	8:00 a.m.
A through B	2:00 p.m.
C through E	2:30 p.m.
F through G	8:00 a.m.
H through J	8:30 a.m.
K through L	9:00 a.m.
M through O	9:30 a.m.
P through R	10:00 a.m.
S	10:30 a.m.
T through Z	1:30 p.m.

LATE REGISTRATION

Tuesday, June 19, and Wednesday, June 20, 1962

Graduate Students

(Graduate students registered on the Urbana campus for the second semester of 1961-62 *who did not complete registration during the period provided, May 23 through May 25*)

Program cards and other preliminary materials should be obtained from the department offices. Authorization cards will be distributed from the Graduate College office according to the following schedule:

A through E	Wednesday, June 20, 8:00 to 12:00 noon
F through K	Wednesday, June 20, 1:00 to 5:00 p.m.
L through R	Tuesday, June 19, 8:00 to 12:00 noon
S through Z	Tuesday, June 19, 1:00 to 5:00 p.m.

Second Four-Week Courses

Monday, July 16, through Saturday, August 11, 1962

Students wishing to register only in courses offered in the second four weeks of the eight-week Summer Session should complete their registration on or before Monday, July 16, 1962.

Directory of Registration Offices

Admissions and Records:	
Graduates	158 Administration Building (West)
Undergraduates	100a Administration Building
Agriculture, College of	104 Mumford Hall
Aviation, Institute of	318 Civil Engineering Hall
Commerce and Business Administration, College of	214 David Kinley Hall

Education, College of.....105 Gregory Hall
Engineering, College of.....119 Civil Engineering Hall
Fine and Applied Arts, College of.....110 Architecture Building
Graduate College.....208 Administration Building (East)
Journalism and Communications, College of.....119 Gregory Hall
Law, College of.....209 Law Building
Liberal Arts and Sciences, College of.....203 Lincoln Hall
Physical Education, College of:
Men.....121 Huff Gymnasium
Women.....117 Women's Gymnasium
Summer Session.....358 Administration Building (West)
Veterinary Medicine, College of.....135 Veterinary Medicine Building

FEES

All fees are due and payable in full at the time of registration unless the Installment Plan is elected. An additional charge of $2.00 is made for this service. The fees are as follows:

	Full Program		Partial Programs			
	Range I Over 4 hours or 1 unit		Range II 2½-4 hours or ¾-1 unit		Range III ½-2 hours or ¼-½ unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
Tuition (except scholarship holders)..	$45.00	$130.00	$30.00	$80.00	$20.00	$45.00
Laboratory, Library, and Supply Fee	5.00	5.00	5.00	5.00	3.00	3.00
Hospital-Medical-Surgical Insurance Fee[1]	5.00	5.00	5.00	5.00	5.00	5.00
Illini Union Fee[2].....	5.00	5.00	5.00	5.00	3.00	3.00
Total	$60.00	$145.00	$45.00	$95.00	$31.00	$56.00

The above list of fees includes only those that are generally applicable to all students. Complete information concerning fees applicable only in special cases (as change of program after registration, flight instruction fee, visitor's fee, etc.) and fee exemption regulations are contained in the University's Undergraduate Study and the Graduate College catalogs, or may be obtained in Room 105 Administration Building (East) of the Office of Admissions and Records.

FINANCIAL AIDS

Scholarships and loan funds are available for students attending the University in the summer. For detailed information about scholarships, write to the Director of the Undergraduate Scholarship Program, 907 South Sixth Street, Champaign, Illinois. Application blanks and information about loan funds at the University of Illinois in Urbana may be obtained from the offices of the Dean of Men, 157 Administration Building (West), the Dean of Women, 100 English Building, or the Bursar, 100b Administration Building. Information concerning National Defense Education Act loan funds may be obtained from the office of the Dean of Students, 152 Administration Building (West).

FINAL EXAMINATIONS

Friday, August 10, and Saturday, August 11, 1962

The examinations for classes meeting four, five, or six times a week are *two hours* in length; those for classes meeting one, two, or three times a week

[1] Students presenting evidence of equivalent coverage and those registered for a schedule in Range III are exempt from the Hospital-Medical-Surgical Insurance Fee upon application to the University Insurance Office.

[2] Persons on the academic, administrative, or permanent nonacademic staff of the University, or on the staffs of the allied surveys and laboratories located on the Urbana-Champaign campus, are exempt from the Illini Union Fee.

A student originally registered for a full program of studies (Range I) who reduces his registration to a partial program (Range II or Range III) must make the changes during the period for the refund of full fees in case of withdrawal from the University if he is to gain the advantage of the reduced fees provided for such schedules.

A student registered for a partial program schedule in Range II who further reduces his total registration to Range III within the full rebate period is refunded the full amount of the difference in tuition and fees. After the full rebate period and before the midpoint of the semester, term, or session, a rebate is made of one-half of these amounts. Thereafter, no rebate is allowed.

are *one hour* in length. Where it is desired to give a two-hour examination in a course regularly scheduled for a one-hour examination, the time for the examination should be arranged by the instructor at any hour on either of the examination days that will avoid conflicts.

Examinations for courses meeting only once a week, courses meeting at 12:00 noon or after 4:00 p.m., and laboratory or graduate courses also should be arranged by the instructor at any hour within the examination period that will avoid conflicts.

For courses meeting two to six times a week, the schedule of examinations is as follows:

Seven o'clock classes

Meeting four, five, or six times a week.....Friday, 7:00 to 9:00 p.m.
Meeting MWF, or any two of those days.....Friday, 7:00 to 8:00 p.m.
Meeting TTS, or any two of those days.....Friday, 8:00 to 9:00 p.m.

Eight o'clock classes

Meeting four, five, or six times a week.....Saturday, 3:00 to 5:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 3:00 to 4:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 4:00 to 5:00 p.m.

Nine o'clock classes

Meeting four, five, or six times a week.....Saturday, 1:00 to 3:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 1:00 to 2:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 2:00 to 3:00 p.m.

Ten o'clock classes

Meeting four, five, or six times a week.....Saturday, 10:00 to 12:00 noon
Meeting MWF, or any two of those days.....Saturday, 10:00 to 11:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 11:00 to 12:00 noon

Eleven o'clock classes

Meeting four, five, or six times a week.....Friday, 10:00 to 12:00 noon
Meeting MWF, or any two of those days.....Friday, 10:00 to 11:00 a.m.
Meeting TTS, or any two of those days.....Friday, 11:00 to 12:00 noon

One o'clock classes

Meeting four, five, or six times a week.....Friday, 3:00 to 5:00 p.m.
Meeting MWF, or any two of those days.....Friday, 3:00 to 4:00 p.m.
Meeting TTS, or any two of those days.....Friday, 4:00 to 5:00 p.m.

Two o'clock classes

Meeting four, five, or six times a week.....Saturday, 8:00 to 10:00 a.m.
Meeting MWF, or any two of those days.....Saturday, 8:00 to 9:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 9:00 to 10:00 a.m.

Three o'clock classes

Meeting four, five, or six times a week.....Friday, 8:00 to 10:00 a.m.
Meeting MWF, or any two of those days.....Friday, 8:00 to 9:00 a.m.
Meeting TTS, or any two of those days.....Friday, 9:00 to 10:00 a.m.

Four o'clock classes

Meeting four, five, or six times a week.....Friday, 1:00 to 3:00 p.m.
Meeting MWF, or any two of those days.....Friday, 1:00 to 2:00 p.m.
Meeting TTS, or any two of those days.....Friday, 2:00 to 3:00 p.m.

Note: For a course so scheduled that the final examination may be given in more than one period, the earliest time in the examination schedule should be chosen. For example, a course regularly meeting on Monday, Wednesday, and Friday, or any two of those days, 1:00 to 3:00 p.m., should schedule the examination for Friday, 3:00 to 4:00 p.m.

STUDENT WELFARE

The University makes every effort to provide the most favorable conditions for the life of the student while he is living in the community. The Dean of Students coordinates and unifies the work of the agencies interested in the student's well-being and gives advice and guidance on problems outside the classroom. Advisers and members of the faculty assist students in arranging programs of study and advise them relative to their classroom work. Aptitude testing and counseling services are provided by the Student Counseling Service.

The University Health Service for students is maintained to promote physical and mental health, to control communicable diseases, and to teach the essentials of healthful living. McKinley Hospital serves both students and faculty.

The office of the Dean of Students maintains an employment service for students who desire part-time employment while attending the University. No charge is made for this service.

ROOM AND BOARD

University residence halls offer the following housing accommodations for the eight-week Summer Session.

The women's residence halls offer room and board at rates ranging from approximately $200.00 to $220.00 for the eight-week Summer Session.

Some residence hall space is available for the use of persons attending University-sponsored short courses or conferences during the summer period. A charge of $3.00 to $4.25 a person per night is made for the use of these facilities.

Applications for residence may be obtained from the Housing Division, 108 Illini Hall, 725 South Wright Street, Champaign, Illinois.

Rooms, and in some cases, room and board, also are available at privately-operated housing units near the campus. Facilities in housing of this type are listed in the Housing Division Office. Room lists and additional information may be obtained by writing the Housing Division.

ILLINI UNION

The Illini Union is the community center for the students, faculty, staff, and alumni on the Urbana campus of the University of Illinois. In conjunction with other student organizations, the Illini Union sponsors a broad program of social, cultural, and recreational activities for the students. Among its many facilities are various food service units consisting of a cafeteria, soda fountain, dining room, and several banquet rooms. The various lounges are meeting places for students and faculty between classes and at other free times. The Browsing Room contains the latest fiction, biography, and other books for general reading as well as a record-lending library. Programs of recorded classical music are held under the direction of a student committee. Recreational facilities include billiard tables, television, and rooms for games. Dances are scheduled during the week. All students are entitled to the full use of the facilities of the Illini Union.

ADDITIONAL INFORMATION

For additional information concerning attendance in the Summer Session at the University of Illinois, write to:

Dean of Admissions and Records
University of Illinois
100a Administration Building
Urbana, Illinois

LISTING OF COURSES

The following time table of summer courses offered by the University is subject to whatever changes may prove necessary at registration time. Notices of all changes in time or place of meeting of classes will be supplied to advisers for checking program cards during registration. Names of instructors are listed subject to their acceptance of appointment for summer service.

Arrangement

The arrangement of subjects in this time table is alphabetical beginning on page 13. The courses offered in each subject are listed numerically with headings to indicate the students for whom they are designed. Courses for undergraduates (designed for freshmen and sophomores) are numbered 100 to 199; for advanced undergraduates (designed for juniors and seniors), 200 to 299; for advanced undergraduates and graduates (junior, senior, or graduate standing required), 300 to 399; for graduates, 400 to 499. Following the title of each course is a statement of the requirements, if any, for admission to the course.

Class periods for each course are indicated by numerals for the hours of the day and by letters for the days of the week. For example, "8-10 MWF" indicates that the class period begins at 8:00 a.m. and continues for two hours on Monday, Wednesday, and Friday; while "11 TTS" means that the class period begins at 11:00 a.m. and continues for fifty minutes on Tuesday, Thursday, and Saturday. The place of meeting of each class is shown by the number of the room and the name of the building.

Credit

Credit is counted in hours for undergraduates and in units for graduates, as shown in the description of each course.

Students having ninety-five or more hours of credit, without regard to the division in which they may be enrolled, are classified as seniors for the purpose of designating those freshman courses which, when taken by seniors, carry reduced credit.

Some courses have variable credit, as 3 to 5 hours or ½ to 2 units, and in registering for a course with variable credit each student puts on his program card the number of hours or units for which he intends to take the course.

Buildings

University buildings are designated by the following abbreviations:

Aeronautical Engineering Laboratory . . Aero Lab
Agricultural Engineering Building . . . . . Agr Eng
Altgeld Hall . . . . . AH
Animal Genetics Building . . . . . An Gen
Animal Sciences Laboratory . . . . . ASL
Architecture Building . . . . . Arch
Bevier Hall . . . . . Bev Hall
Burrill Hall . . . . . Bur Hall
Ceramics Building . . . . . Cer
Chemistry Annex . . . . . CA
Child Development . . . . . CD
Civil Engineering Hall . . . . . CEH
Commerce Annex . . . . . Com Annex
Dairy Manufactures Building . . . . . DMB
Davenport Hall . . . . . DH
David Kinley Hall . . . . . DKH
East Chemistry Building . . . . . EC
Education Project and Guidance Building . . . . . EPGB
Electrical Engineering Annex . . . . . EE Annex
Electrical Engineering Building . . . . . EEB
Elementary Education Center . . . . . EEC
English Building . . . . . EB
Fine Arts Building . . . . . FAB
Floriculture Building . . . . . Flor
Foundry and Pattern Laboratory . . . . . Fdy & Pat Lab
Gregory Hall . . . . . GH
Harker Hall . . . . . HH
Hill Annex . . . . . HA
Horticulture Field Laboratory . . . . . HFL
Huff Gymnasium . . . . . Huff Gym
Hydraulic Engineering Laboratory . . . . . Hyd Eng Lab
Krannert Art Museum . . . . . KM
Law Building . . . . . Law
Library . . . . . Lib
Lincoln Hall . . . . . LH
Mechanical Engineering Building . . . . . MEB
Mechanical Engineering Laboratory . . . . . MEL
Men's Old Gymnasium . . . . . Old Gym
Mining and Metallurgy Laboratory . . . . Met Lab
Mumford Hall . . . . . MH
Natural History Building . . . . . NHB
Noyes Laboratory of Chemistry . . . . . NL
Observatory . . . . . Observ
Physics Building . . . . . PB
Physics Laboratory . . . . . PL
Practice Annex . . . . . PA
Quonset . . . . . Q
Rural Electric Laboratory . . . . . RE Lab
Sixth Street Building . . . . . SSB
Smith Music Hall . . . . . SMH
Speech Clinic . . . . . Sp Clinic
Stiven House . . . . . SH
Stock Judging Pavilion . . . . . SP
String Annex . . . . . SA
Student Rehabilitation Center . . . . Rehab Center
Surveying Building . . . . . Surv Bldg
Talbot Laboratory . . . . . TL
Theory Annex . . . . . TA
Transportation Building . . . . . TB
University High School . . . . . UHS
Vegetable Crops Building . . . . . Veg Crops
Veterinary Clinic, Large Animal . . . . . VCLA
Veterinary Clinic, Small Animal . . . . . VCSA
Veterinary Medicine Building . . . . . VM
Women's Gymnasium . . . . . W Gym

ACCOUNTANCY

DEPARTMENT OFFICE 321 D K H

COURSES FOR UNDERGRADUATES

ACCY 101 PRINCIPLES OF ACCOUNTING I.
BEGINNERS COURSE.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
LECT-DISC C 10 MTUWTHFS 317 D K H HOLZER

ACCY 105 PRINCIPLES OF ACCOUNTING II.
CONTINUATION OF ACCY. 101. PREREQUISITE--ACCY. 101.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
LECT-DISC B 9 MTUWTHFS 113 D K H DE MARIS

ACCY 106 ELEMENTARY COST ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
LECT-DISC C 10 MTUWTHFS 312 D K H

ACCY 108 INTERMEDIATE ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
LECT-DISC D 11 MTUWTHFS 113 D K H GRIFFIN

COURSES FOR ADVANCED UNDERGRADUATES

ACCY 201 FUNDAMENTALS OF ACCOUNTING.
A SURVEY COURSE FOR NON-COMMERCE STUDENTS ONLY.
3 HOURS
LECT-DISC A 8 MTUWTHFS 317 D K H SCHLOSSER

ACCY 274 BASIC FEDERAL INCOME TAX ACCOUNTING.
PREREQUISITE--ACCY. 108.
3 HOURS
LECT-DISC A 8 MTUWTHFS 122 D K H BRIGHTON

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ACCY 308 ADVANCED ACCOUNTING.
PREREQUISITE--ACCY. 106 AND 108, AN AVERAGE OF C OR BETTER IN
PRECEDING COURSES IN ACCOUNTANCY.
3 HOURS, OR 3/4 UNIT
LECT-DISC B 9 MTUWTHFS 115 D K H PERRY

ACCY 366 ADVANCED COST ACCOUNTING.
PREREQUISITE--MINIMUM OF NINE HOURS OF ACCOUNTANCY, INCLUDING
ACCY. 106.
2 HOURS, OR 1/2 UNIT
LECT-DISC X 12 MTUWTH 317 D K H

ACCY 371 AUDITING.
PREREQUISITE--ACCY. 308.
3 HOURS, OR 3/4 UNIT
LECT-DISC C 10 MTUWTHFS 115 D K H DE MARIS

ACCY 377 ADVANCED PROBLEMS.
PREREQUISITE--SENIOR STANDING, CREDIT OR REGISTRATION IN ACCY. 371.
3 HOURS, OR 1 UNIT
LECT-DISC D 11 MTUWTHFS 115 D K H PERRY

COURSES FOR GRADUATES

ACCY 466 COST ACCOUNTING THEORY AND ANALYSIS.
1 UNIT
LECT-DISC 2-4 TU F 212 D K H HOLZER

ACCY 481 CONCEPTS AND PRINCIPLES.
1 UNIT
LECT-DISC 8-10 M TH 317A D K H GRIFFIN

ACCY 483 INCOME DETERMINATION.
1 UNIT
LECT-DISC 8-10 M TH 212 D K H BEDFORD

ACCY 489 HISTORY OF ACCOUNTING THEORY.
1 UNIT
LECT-DISC 8-10 TU F 212 D K H ZIMMERMAN

ACCY 493 SPECIAL RESEARCH PROBLEMS.
1/4 TO 2 UNITS
CONF ARR ZIMMERMAN

ACCY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
M. S. CANDIDATES SHOULD REGISTER IN SECTION S1, AND PH. D.
CANDIDATES IN SECTION S2.
DISC S1 ARR BEDFORD
DISC S2 ARR BEDFORD

ADVERTISING

DEPARTMENT OFFICE 120A G H

COURSES FOR ADVANCED UNDERGRADUATES

ADV 281 INTRODUCTION TO ADVERTISING.
SAME AS MKTG. 281. PREREQUISITE--JUNIOR STANDING.
3 HOURS
LECT-DISC C 10 MTUWTHF 306 D K H DEBOER
C 4 M 306 D K H DEBOER

COURSES FOR GRADUATES

ADV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN ADVERTISING.
1 TO 2 UNITS
CONF ARR STAFF

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

DEPARTMENT OFFICE 101 T B

COURSES FOR GRADUATES

A A E 493 SPECIAL PROBLEMS.
1 TO 2 UNITS
CONF ARR STAFF

A A E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

AGRICULTURAL ECONOMICS
INCLUDING RURAL SOCIOLOGY

AGRICULTURAL ECONOMICS

DEPARTMENT OFFICE 305 M H

COURSES FOR ADVANCED UNDERGRADUATES

AG EC 200 PROBLEMS IN AGRICULTURAL ECONOMICS.
PREREQUISITE--MINIMUM GRADE-POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION. CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE IN ADVANCE OF REGISTRATION. WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
3 TO 5 HOURS
A--AGRICULTURAL MARKETING BARTLETT, BRINEGAR, BROADBENT, HIERONYMUS JUDGE, KELLY, MUTTI, ROUSH, SCHMIDT, STOREY
B--AGRICULTURAL PRICES AND STATISTICAL ANALYSIS JUDGE, WEST
C--FARM MANAGEMENT AND LAND ECONOMICS BAKER, HEADLEY, HERBST, HUNTER, REISS, SWANSON, THOMPSON, WILLS
D--RURAL ORGANIZATION FOLSE
E--AGRICULTURAL LAW KRAUSZ
F--AGRICULTURAL POLICY HALCROW, SCHMIDT, SPITZE, THOMPSON
G--AGRICULTURAL FINANCE BAKER, SPITZE
CONF ARR

AG EC 230 MARKETING OF AGRICULTURAL PRODUCTS.
FIELD TRIP. ESTIMATED EXPENSE. $3.
3 HOURS

LECT-DISC	10	MTUWTHF	316S M H	ROUSH
	12	W	316S M H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG EC 324 FARM OPERATION.
FIELD TRIPS. ESTIMATED EXPENSE. $5. PREREQUISITE--AG. EC. 22 .
3 HOURS. OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 19-JULY 14.

LECT-DISC	1-3	MTUWTHF	127 M H	WILLS
LECT-DISC	7	TU TH	127 M H	

AG EC 331 GRAIN MARKETING.
SAME AS MKTG. 331. PREREQUISITE--AG.EC. 230, OR MKTG. 101.
FIELD TRIPS, ESTIMATED EXPENSE, $10.
3 HOURS, OR 1/2 UNIT

LECT-DISC	8-10	MTUWTH	316S M H		HIERONYMUS

COURSES FOR GRADUATES

AG EC 401 INTERNATIONAL COMPARATIVE AGRICULTURE.
1 UNIT

LECT-DISC	11	MTUWTH	405 M H		SCHMIDT

AG EC 491 SEMINAR AND SPECIAL TOPICS.
EACH GRADUATE STUDENT WHOSE MAJOR IS AGRICULTURAL ECONOMICS MUST REGISTER IN THIS COURSE. ONLY STUDENTS WHO REGISTER FOR CREDIT AND COMPLETE SPECIAL STUDIES UNDER DIRECTION OF ONE OR MORE STAFF MEMBERS WILL RECEIVE CREDIT.
0 TO 2 UNITS

LECT-DISC	3	W	405 M H		STAFF

AG EC 499 THESIS RESEARCH.
INDIVIDUAL RESEARCH UNDER SUPERVISION OF MEMBERS OF THE GRADUATE TEACHING STAFF IN THEIR RESPECTIVE FIELDS.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR				STAFF

RURAL SOCIOLOGY
DEPARTMENT OF AGRICULTURAL ECONOMICS.

COURSES FOR ADVANCED UNDERGRADUATES

R SOC 277 RURAL SOCIAL PROBLEMS.
SAME AS SOCIOL. 277. FIELD TRIP, ESTIMATED EXPENSE, $5.
PREREQUISITE--THREE HOURS OF SOCIOLOGY, OR SIX HOURS OF SOCIAL SCIENCE OR CONSENT OF INSTRUCTOR.
3 HOURS

LECT-DISC	11	MTUWTHF	316S M H		LATHROPE
	12	TU	316S M H		

COURSES FOR GRADUATES

R SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS SOCIOL. 487. PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT

CONF	ARR				STAFF

AGRICULTURAL ENGINEERING

DEPARTMENT OFFICE 206A AGR ENG

NOTE COURSES IN AGRICULTURAL ENGINEERING FOR NON-ENGINEERING STUDENTS ARE 242, 300, 361, 381. COURSE FOR ENGINEERING STUDENTS IS 396.

COURSES FOR ADVANCED UNDERGRADUATES

AG E 242 GASOLINE, LIQUIFIED PETROLEUM GAS, AND DIESEL TRACTORS.
PREREQUISITE--AGR. ENG. 112.
3 HOURS
FIRST FOUR WEEKS JUNE 19-JULY 14

LECT-DISC	8-10	MTU THF	50	AGR ENG	YOERGER
LAB	3-5	MTUWTH	TRACTOR LAB		

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 300 SPECIAL PROBLEMS.
AN AGRICULTURAL PROBLEM WITH ENGINEERING IMPLICATIONS IS SELECTED FOR STUDY, INVESTIGATION, AND REPORT WHEREIN A SATISFACTORY SOLUTION DOES NOT REQUIRE A BACKGROUND OF ENGINEERING EDUCATION. FOR NONENGINEERING STUDENTS ONLY. PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED FOR A SECOND SPECIAL PROBLEM COURSE IN ADVANCE OF REGISTRATION.
3 HOURS, OR 1/2 UNIT
ARR STAFF

AG E 361 DEVELOPMENT AND FUNCTION OF FAMILY HOUSING.
SAME AS HOME ECON. 361.
3 HOURS, OR 1/2 UNIT
SECOND FOUR WEEKS JULY 16 - AUGUST 11.

LECT-DISC	8-11	M W F	218	AGR ENG	HANSEN
LAB	8-11	TU TH	202	AGR ENG	

AG E 396 SPECIAL PROBLEMS.
AN AGRICULTURAL PROBLEM IS SELECTED FOR STUDY, INVESTIGATION, AND REPORT WHEREIN A SATISFACTORY SOLUTION REQUIRES A STRONG BACKGROUND OF ENGINEERING EDUCATION. PREREQUISITE--SENIOR STANDING IN ENGINEERING.
3 HOURS, OR 1/2 UNIT
ARR STAFF

COURSES FOR GRADUATES

AG E 496 PROBLEMS IN AGRICULTURAL ENGINEERING.
PREREQUISITE--BACHELORS DEGREE IN AGRICULTURAL ENGINEERING OR OTHER ENGINEERING CURRICULUM, WITH CREDIT IN COURSES ESSENTIAL TO THE OPTIONAL LINE OF STUDY, CONSENT OF HEAD OF DEPARTMENT.
1 UNIT
ARR STAFF

AG E 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN AGRICULTURAL ENGINEERING OR EQUIVALENT--ENGINEERING AND AGRICULTURAL DEGREES.
1 TO 2 UNITS
ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES

AGR 208 COOPERATIVE EXTENSION WORK--SUMMER TRAINING.
FULL-TIME WORK WITH EXTENSION SERVICE PROGRAMS IN SELECTED COUNTIES UNDER THE DIRECTION OF EITHER FARM OR HOME ADVISERS AND ASSISTANT STATE LEADERS. APPROXIMATE TRAINING PERIOD IS JUNE TO SEPTEMBER. SALARY SUFFICIENT TO COVER MAINTENANCE AND EXPENSES WILL BE PROVIDED. TERM REPORT REQUIRED. PREREQUISITE--CONSENT OF INSTRUCTOR. RECOMMENDED THIS COURSE BE PRECEDED BY AGR. 206 OR H. E. 377.
2 HOURS
ARR ANDERSON

AGRONOMY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AGRON 300 ADVANCED SPECIAL PROBLEMS.
INDIVIDUAL PROBLEMS IN CROPS OR SOILS. GRADUATE STUDENTS MAJORING IN AGRONOMY DO NOT GET GRADUATE CREDIT IN THIS COURSE. PREREQUISITE MINIMUM GRADE POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION. SENIOR STANDING. CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE IN ADVANCE OF REGISTRATION.
3 TO 5 HOURS, OR 1/2 TO 2 UNITS
LAB-DISC ARR STAFF

COURSES FOR GRADUATES

AGRON 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK TO BE TAKEN IN THE FOLLOWING SUBJECTS--
A--SOILS ALDRICH, BEAVERS, BRAY, FEHRENBACHER, GIESEKING, KLUTE, KURTZ, LANG, MELSTED, ODELL, PETERS, RUSSEL, SABEY, STEVENSON, AND TYNER
B--CROPS ALEXANDER, BONNET, BROWN, BURGER, EARLEY, HADLEY, HAGEMAN, HANSON, HITTLE, HOOKER, HOWELL, JACKOBS, JACOB, LAUGHNAN LENG, PATTERSON, PENDLETON, SEIF, SLIFE, WEIBEL, AND WOOLLEY.
LAB-DISC ARR STAFF

ANIMAL SCIENCE
INCLUDING ANIMAL NUTRITION

DEPARTMENT OFFICE 328 M H

COURSES FOR ADVANCED UNDERGRADUATES

AN S 200 SPECIAL PROBLEMS.
INDIVIDUAL RESEARCH IN ANIMAL SCIENCE. PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION. SENIOR STANDING. CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AN S 330 REPRODUCTION AND ARTIFICIAL INSEMINATION OF FARM ANIMALS.
SAME AS D. S. 330. PREREQUISITE--ZOOL. 104 AND EITHER D. S. 100 OR AN. SCI. 100.
3 HOURS. OR 3/4 UNIT. SUMMER--1/2 UNIT FOR 4 WEEKS
FIRST FOUR WEEKS-JUNE 19 TO JULY 14.

LAB-DISC	10-12	MTU THF	414	A S L	VANDEMARK
	8-12	W	414	A S L	

COURSES FOR GRADUATES

AN S 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ZOOL. 408. COMBINED CREDIT IN AN.SCI. 407 AND 408. MAY NOT EXCEED TWO UNITS. PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
ARR NALBANDOV

AN S 410 RESEARCH METHODS IN ANIMAL SCIENCE.
STUDENTS TAKING THIS COURSE MAY REGISTER MORE THAN ONCE BUT TOTAL CREDIT MAY NOT EXCEED ONE UNIT. PREREQUISITE--CONSENT OF INSTRUCTOR
1/4 TO 1 UNIT
ARR ALBERT, BECKER
BREIDENSTEIN
GARRIGUS, SCOTT

AN S 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
ARR GRADUATE STAFF

ANIMAL NUTRITION
DIVISION OF DEPARTMENT OF ANIMAL SCIENCE

DIVISION OFFICE 120 A S L

COURSES FOR GRADUATES

AN NU 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
ARR GRADUATE STAFF

ANTHROPOLOGY

DEPARTMENT OFFICE 137 D H

MAJOR--TWENTY HOURS FROM ANY COURSE IN ANTHROPOLOGY, INCLUDING ANTHROP. 102 AND 103. A DOUBLE MAJOR IN ANTHROPOLOGY AND SOCIOLOGY IS NOT PERMITTED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ECONOMICS, GEOGRAPHY, HISTORY, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND ZOOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES OR IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A SOLE MINOR.
NOTE--INDIVIDUAL INSTRUCTION WILL BE AVAILABLE FOR EDMUND J JAMES SCHOLARS.

COURSES FOR UNDERGRADUATES

ANTH 103 INTRODUCTION TO CULTURAL ANTHROPOLOGY.
THIS COURSE, WITH ANTHROPOLOGY 102, SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. CREDIT IS NOT GIVEN FOR BOTH ANTH. 103 AND SOC. 104. OPEN TO FRESHMEN.
4 HOURS
*HONORS SECTION OPEN TO JAMES SCHOLARS AND OTHER HONORS STUDENTS.

LECT		10-12	MTUW	311N D H	BRUNER
QUIZ	A	10-12	TH	311N D H	
QUIZ	B	10-12	F	311N D H	
QUIZ	C	8-10	F	311N D H	

COURSES FOR ADVANCED UNDERGRADUATES

ANTH 290 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS
CONF A ARR BRUNER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ANTH 354 FIELD TECHNIQUES IN ARCHAEOLOGY.
PARTICIPATION IN ARCHAEOLOGICAL EXCAVATION, TECHNIQUES, METHODS, AND PROCEDURES DISCUSSED IN ACTUAL WORKING CONDITIONS. CREDIT MAY BE RECEIVED TWICE FOR THIS COURSE IF THE AREA OR PROBLEMS INVOLVED ARE DIFFERENT. PREREQUISITE--ANTH. 102 AND 103 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT
A ARR MCGREGOR

ANTH 355 LABORATORY TECHNIQUES AND PROBLEMS IN ARCHAEOLOGY.
LABORATORY WORK IN THE FIELD, STUDYING, EVALUATING, AND WRITING FINAL REPORT ON PRECEDING FIELD WORK. CREDIT MAY BE RECEIVED TWICE FOR THIS COURSE IF THE AREA OR PROBLEMS INVOLVED ARE DIFFERENT. PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT
A ARR MCGREGOR

ANTH 364 FIELD WORK IN CULTURAL ANTHROPOLOGY.
SUPERVISED PARTICIPATION IN FIELD RESEARCH, TECHNIQUE AND PROCEDURES DISCUSSED AND PRACTICED UNDER ACTUAL WORKING CONDITIONS. CREDIT MAY BE RECEIVED TWICE IN THIS COURSE IF THE AREA OR PROBLEMS INVOLVED ARE DIFFERENT. PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED. CONCURRENT REGISTRATION IN ANTH. 365, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

A	ARR		CASAGRANDE
B	ARR		HALE

ANTH 365 ANALYSIS OF FIELD DATA IN CULTURAL ANTHROPOLOGY.
EVALUATION, ORGANIZATION, AND WRITE-UP OF FIELD DATA. CREDIT MAY BE RECEIVED TWICE FOR THIS COURSE IF THE AREA OR PROBLEMS INVOLVED ARE DIFFERENT. PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED, CONSENT OF INSTRUCTOR
3 HOURS, OR 1 UNIT

A	ARR		CASAGRANDE
B	ARR		HALE

ANTH 371 CULTURE AND PERSONALITY.
PREREQUISITE--AN INTRODUCTORY COURSE IN ANTHROPOLOGY, SOCIOLOGY OR PSYCHOLOGY, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	A	1-3	MTUW	311N D H	BRUNER

COURSES FOR GRADUATES

ANTH 489 READINGS IN ANTHROPOLOGY.
PREREQUISITE--ONE SEMESTER OF GRADUATE WORK IN ANTHROPOLOGY--CONSENT OF ADVISER.
1/2 TO 1 UNIT

CONF	A	ARR	BRUNER

ANTH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS

CONF	*A	ARR	STAFF
	*B	ARR	

ARCHITECTURE

DEPARTMENT OFFICE 106 ARCH

IN THE CURRICULUM IN ARCHITECTURE, NORMAL COURSE PROGRESS IN SEQUENCE IS IMPERATIVE. STUDENTS FAILING TO COMPLETE ANY REQUIRED COURSE MORE THAN ONE SEMESTER LATER THAN THE TIME DESIGNATED IN THE CURRICULUM, ARE PROHIBITED FROM PROGRESSIVE REGISTRATION IN ARCHITECTURAL COURSES UNTIL THE DEFICIENCY IS CORRECTED. APPLICABLE TO STUDENTS ENTERING IN SEPTEMBER, 1958.

COURSES FOR ADVANCED UNDERGRADUATES

ARCH 233 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 132, CREDIT OR REGISTRATION IN T A M 150 OR 171, REGISTRATION IN ARCH 241.
3 HOURS

LAB	8-12	M W F	224	FAB	DENHAM
	8-11	TU TH	224	FAB	DENHAM

ARCH 234 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 233.
3 HOURS

LAB	8-12	M W F	232	FAB	DENHAM
	8-11	TU TH	232	FAB	DENHAM

ARCH 235 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 234. REGISTRATION IN ARCH. 265.
5 HOURS

LAB	8-12	M W F	206	FAB	GUEVREKIAN
	1-5	M W F	206	FAB	GUEVREKIAN
	1-4	TU TH	206	FAB	GUEVREKIAN

ARCH 236 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 235 AND 265.
5 HOURS

LAB	8-12	M W F	216	FAB	GUEVREKIAN
	1-5	M W F	216	FAB	GUEVREKIAN
	1-4	TU TH	216	FAB	GUEVREKIAN

ARCH 241 MATERIALS AND METHODS OF CONSTRUCTION. III.
PREREQUISITE--ARCH. 142. REGISTRATION IN ARCH. 233.
2 HOURS

LECT	2-4	TU TH	302	ARCH	HODGE

ARCH 247 STRUCTURAL PLANNING.
PREREQUISITE--ARCH. 257.
3 HOURS

LECT-DISC	10-12	TU TH S	302	ARCH	TANG

COURSES IN ART APPRECIATION AND THE HISTORY OF ART.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 313 ITALIAN RENAISSANCE ART.
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR
CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 UNIT

LAB A	1	MTUWTHF	62	K M	PINNELL

ART

DEPARTMENT OFFICE 143 FAB

PROFESSIONAL AND STUDIO COURSES

COURSES FOR UNDERGRADUATES

ART 101 WATER COLOR.
PREREQUISITE--FOR ART STUDENTS. ART 118 AND 120. FOR OTHERS.
CONSENT OF INSTRUCTOR.
2 HOURS

LAB A	1-5	M W F	308	F A B	DIETEMANN

ART 102 WATER COLOR.
PREREQUISITE--ART 101.
2 HOURS

LAB A	1-5	M W F	308	F A B	DIETEMANN

ART 103 INTRODUCTION TO FIGURE SKETCHING.
ELEMENTARY FIGURE SKETCHING FROM COSTUMED MODELS. NOT
OPEN TO STUDENTS MAJORING IN ART.
1 HOUR

LAB A	7-10	M F	236	F A B	BRIGGS

ART 105 INTRODUCTION TO WATER COLOR PAINTING.
ELEMENTARY WATER COLOR SKETCHING FROM LANDSCAPE. NOT OPEN TO STUDENTS MAJORING IN ART. MAY BE REPEATED FOR TWO ADDITIONAL HOURS OF CREDIT.
2 HOURS

LAB	A	1-5	M W F	308	F A B		DIETEMANN

ART 106 INTRODUCTION TO OIL PAINTING.
ELEMENTARY OIL PAINTING AND SKETCHING FROM STILL LIFE AND LANDSCAPE. NOT OPEN TO STUDENTS MAJORING IN ART. MAY BE REPEATED FOR TWO ADDITIONAL HOURS OF CREDIT.
2 HOURS

LAB	A	2-5	MTUWTH	324	F A B		BYNG

ART 107 ELEMENTARY DRAWING.
PRACTICAL PROBLEMS IN ELEMENTARY DRAWING AS APPLIED TO SOLIDS, LINE DRAWING, LIGHT AND SHADE, OUTDOOR AND STUDIO SKETCHING. FOR STUDENTS NOT MAJORING IN ART. MAY BE REPEATED FOR TWO ADDITIONAL CREDITS.
2 HOURS

LAB	A	8-10	MTUWTHFS	236	F A B		BRIGGS

ART 110 ELEMENTARY DESIGN.
EXERCISES IN ELEMENTARY DESIGN WITH EMPHASIS ON THE PRACTICAL APPLICATION OF THE PRINCIPLES OF DESIGN. NOT OPEN TO STUDENTS MAJORING IN ART.
1 HOUR

LAB	A	10-1	M F	9	F A B		COLLIN

ART 117 DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
3 HOURS

LAB	A	7-10	MTUWTHFS	236	F A B		BRIGGS

ART 118 DRAWING, II.
PREREQUISITE--ART 117. OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
2 HOURS

LAB	A	8-10	MTUWTHFS	236	F A B		BRIGGS

ART 119 DESIGN.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
2 HOURS

LAB	A	10-12	MTUWTHFS	9	F A B		COLLIN

ART 120 DESIGN.
PREREQUISITE--ART 119. OPEN ONLY TO STUDENTS IN COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
3 HOURS

LAB	A	10-1	MTUWTHFS	9	F A B		COLLIN

ART 125 LIFE DRAWING.
PREREQUISITE--ART 118.
2 HOURS

LAB	A	8-10	MTUWTHFS	336	F A B		WICKS

ART 126 LIFE DRAWING.
PREREQUISITE--ART 125.
2 HOURS

LAB	A	8-10	MTUWTHFS	336	F A B		WICKS

ART 127 DRAWING III.
PREREQUISITE--ART 118.
3 HOURS

LAB	A	7-10	MTUWTHFS	336	F A B		WICKS

ART 128 DRAWING IV.
PREREQUISITE--ART 127.
3 HOURS

LAB	A	7-10	MTUWTHFS	336	F A B	WICKS

ART 129 ANATOMY, I.
PREREQUISITE--ART 118.
2 HOURS

LAB	A	8-10	MTUWTHFS	336	F A B	WICKS

ART 130 ANATOMY, II.
PREREQUISITE--ART 129.
2 HOURS

LAB	A	8-10	MTUWTHFS	336	F A B	WICKS

ART 131 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	10-12	MTUWTHFS	9	F A B	COLLIN

ART 132 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 131.
2 HOURS

LAB	A	10-12	MTUWTHFS	9	F A B	COLLIN

ART 133 DESIGN WORKSHOP.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	2-5	MTUWTH	39	F A B	BROWNE

ART 134 DESIGN WORKSHOP.
PREREQUISITE--ART 133.
2 HOURS

LAB	A	2-5	MTUWTH	39	F A B	BROWNE

ART 141 STILL LIFE.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	2-5	MTUWTH	324	F A B	BYNG

ART 142 STILL LIFE.
PREREQUISITE--ART 141.
2 HOURS

LAB	A	2-5	MTUWTH	324	F A B	BYNG

ART 150 SCULPTURE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

LAB	A	2-5	MTUWTH	39	F A B	BROWNE

ART 151 SCULPTURE.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	2-5	MTUWTH	39	F A B	BROWNE

ART 152 SCULPTURE.
PREREQUISITE--ART 151.
2 HOURS

LAB	A	2-5	MTUWTH	39	F A B	BROWNE

ART 181 FREEHAND DRAWING.
PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS

LAB	A	8-10	MTUWTHFS	236	F A B	BRIGGS

ART 182 FREEHAND DRAWING.
PRIMARILY FOR STUDENTS IN ARCHITECTURE. PREREQUISITE--ART 181.
2 HOURS

LAB	A	8-10	MTUWTHFS	236	F A B	BRIGGS

ART 183 FREEHAND DRAWING.
PRIMARILY FOR STUDENTS IN ARCHITECTURE. PREREQUISITE--ART 182.
2 HOURS
LAB A 1-5 M W F 308 F A B DIETEMANN

ART 184 FREEHAND DRAWING.
PRIMARILY FOR STUDENTS IN ARCHITECTURE. PREREQUISITE--ART 183.
2 HOURS
LAB A 1-5 M W F 308 F A B DIETEMANN

ART 190 RECREATIONAL CRAFTS.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 2-5 TUWTHF 106 F A B SCHULTZ

ART 191 RECREATIONAL CRAFTS.
PREREQUISITE--ART 190.
2 HOURS
LAB A 2-5 TUWTHF 106 F A B SCHULTZ

ART 192 METALWORK AND JEWELRY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 7-10 M W FS 24 D K H FRITH

ART 193 METALWORK AND JEWELRY, II.
PREREQUISITE--ART 192.
2 HOURS
LAB A 7-10 M W FS 24 D K H FRITH

ART 194 POTTERY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 7-10 TU THFS 23 D K H FRITH

ART 195 POTTERY, II.
PREREQUISITE--ART 194.
2 HOURS
LAB A 7-10 TU THFS 23 D K H FRITH

COURSES FOR ADVANCED UNDERGRADUATES

ART 201 WATER COLOR.
PREREQUISITE--ART 102.
2 HOURS
LAB A 1-5 M W F 308 F A B DIETEMANN

ART 202 WATER COLOR.
PREREQUISITE--ART 201.
2 HOURS
LAB A 1-5 M W F 308 F A B DIETEMANN

ART 203 ART EDUCATION LABORATORY.
ART IN THE ELEMENTARY SCHOOL. PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS
*FOR NON-ART STUDENTS ONLY.
LAB *A 2-5 TUWTHF 106 F A B SCHULTZ

ART 204 ART EDUCATION LABORATORY.
ART IN THE SECONDARY SCHOOL. PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS
LAB A 2-5 TUWTHF 106 F A B SCHULTZ

ART 223 FIGURE DRAWING AND SKETCH.
PRIMARILY FOR STUDENTS IN ADVERTISING DESIGN CURRICULUM.
PREREQUISITE--ART 128, 130.
3 HOURS
LAB A 7-10 MTUWTHFS 336 F A B WICKS

ART 224 FIGURE DRAWING AND SKETCH.
PREREQUISITE--ART 223. PRIMARILY FOR STUDENTS IN ADVERTISING DESIGN CURRICULUM.
3 HOURS
LAB A 7-10 MTUWTHFS 336 F A B WICKS

ART 225 INTERMEDIATE DRAWING.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS
LAB A 8-10 MTUWTHFS 336 F A B WICKS

ART 226 INTERMEDIATE DRAWING.
PREREQUISITE--ART 225.
2 HOURS
LAB A 8-10 MTUWTHFS 336 F A B WICKS

ART 231 INTERMEDIATE COMPOSITION.
PREREQUISITE--ART 132.
3 HOURS
LAB A 10-1 MTUWTHFS 318 F A B SPRAGUE

ART 232 INTERMEDIATE COMPOSITION.
PREREQUISITE--ART 231.
3 HOURS
LAB A 10-1 MTUWTHFS 318 F A B SPRAGUE

ART 235 ILLUSTRATION.
PREREQUISITE--ART 132.
2 HOURS
LAB A 10-12 MTUWTHFS 311 F A B SINSABAUGH

ART 236 ILLUSTRATION.
PREREQUISITE--ART 235.
2 HOURS
LAB A 10-12 MTUWTHFS 311 F A B SINSABAUGH

ART 237 ADVANCED ILLUSTRATION.
PREREQUISITE--ART 236.
2 HOURS
LAB A 10-12 MTUWTHFS 311 F A B SINSABAUGH

ART 238 ADVANCED ILLUSTRATION.
PREREQUISITE--ART 237.
2 HOURS
LAB A 10-12 MTUWTHFS 311 F A B SINSABAUGH

ART 243 FIGURE PAINTING.
PREREQUISITE--JUNIOR STANDING IN ART
2 HOURS
LAB A 10-12 MTUWTHFS 318 F A B SPRAGUE

ART 244 FIGURE PAINTING.
PREREQUISITE--ART 243.
2 HOURS
LAB A 10-12 MTUWTHFS 318 F A B SPRAGUE

ART 251 ADVANCED SCULPTURE.
PREREQUISITE--ART 152.
2 HOURS
LAB A 2-5 MTUWTH 39 F A B BROWNE

ART 252 ADVANCED SCULPTURE.
PREREQUISITE--ART 251.
2 HOURS
LAB A 2-5 MTUWTH 39 F A B BROWNE

ART 261 LAYOUT AND LETTERING.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS
LAB A 10-1 MTUWTHFS 311 F A B SINSABAUGH

ART 262 LAYOUT AND LETTERING.
PREREQUISITE--ART 261.
3 HOURS
LAB A 10-1 MTUWTHFS 311 F A B SINSABAUGH

ART 265 ADVERTISING DESIGN.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS
LAB A 10-1 MTUWTHFS 311 F A B SINSABAUGH

ART 266 ADVERTISING DESIGN.
PREREQUISITE--ART 265.
3 HOURS
LAB A 10-1 MTUWTHFS 311 F A B SINSABAUGH

ART 267 ADVANCED ADVERTISING DESIGN.
PREREQUISITE--ART 266.
5 HOURS
*ADDITIONAL HOURS TO BE ARRANGED.
LAB *A 10-1 MTUWTHFS 311 F A B SINSABAUGH

ART 268 ADVANCED ADVERTISING DESIGN.
PREREQUISITE--ART 267.
5 HOURS
*ADDITIONAL HOURS TO BE ARRANGED.
LAB *A 10-1 MTUWTHFS 311 F A B SINSABAUGH

ART 275 INDUSTRIAL DESIGN.
PREREQUISITE--ART 134.
3 HOURS
LAB A 10-1 MTUWTHFS 12 F A B RAMSAY

ART 276 INDUSTRIAL DESIGN.
PREREQUISITE--ART 275. FIELD TRIP REQUIRED.
3 HOURS
LAB A 10-1 MTUWTHFS 12 F A B RAMSAY

ART 277 ADVANCED INDUSTRIAL DESIGN.
PREREQUISITE--ART 276.
5 HOURS
*ADDITIONAL HOURS TO BE ARRANGED.
LAB *A 10-1 MTUWTHFS 12 F A B RAMSAY

ART 278 ADVANCED INDUSTRIAL DESIGN.
PREREQUISITE--ART 277.
5 HOURS
*ADDITIONAL HOURS TO BE ARRANGED.
LAB *A 10-1 MTUWTHFS 12 F A B RAMSAY

ART 281 FREEHAND DRAWING.
PRIMARILY FOR STUDENTS IN ARCHITECTURE. PREREQUISITE--ART 184.
2 HOURS
LAB A 1-5 M W F 308 F A B DIETEMANN

ART 282 FREEHAND DRAWING.
PRIMARILY FOR STUDENTS IN ARCHITECTURE. PREREQUISITE--ART 281.
2 HOURS
LAB A 1-5 M W F 308 F A B DIETEMANN

ART 292 INTRODUCTION TO METAL DESIGN IN JEWELRY.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

LAB	A	7-10	M W FS	24	D K H		FRITH

ART 293 DEVELOPMENT OF METAL DESIGN IN JEWELRY.
PREREQUISITE--ART 292.
3 HOURS

LAB	A	7-10	M W FS	24	D K H		FRITH

ART 294 CERAMIC DESIGN. I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

LAB	A	7-10	TU THFS	23	D K H		FRITH

ART 295 CERAMIC DESIGN. II.
PREREQUISITE--ART 294.
3 HOURS

LAB	A	7-10	TU THFS	23	D K H		FRITH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 323 DRAWING.
PREREQUISITE--ART 126 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE.
2 HOURS, OR 1/2 TO 1 UNIT

LAB	A	8-10	MTUWTHFS	236	F A B		BRIGGS

ART 333 PAINTING.
PREREQUISITE--ART 142 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M. F. A. IN PAINTING.
COURSE MAY BE REPEATED FOR A TOTAL OF 2 UNITS.
2 HOURS, OR 1/2 TO 1 UNIT

LAB	A	2-5	MTUWTH	324	F A B		BYNG

COURSES FOR GRADUATES

ART 491 SPECIAL PROBLEMS.
1 TO 2 UNITS

LAB		ARR					STAFF

ART 495 PAINTING LABORATORY.
1 TO 2 UNITS

LAB	A	ARR					SPRAGUE

ASTRONOMY

DEPARTMENT OFFICE 108A OBSERVATORY

MAJOR--TWENTY HOURS IN ASTRONOMY.

MINOR--TWENTY HOURS WHICH MUST INCLUDE PHYSICS 106, 107, AND 108. THE REMAINING EIGHT HOURS MAY BE TAKEN IN PHYSICS OR IN ONE OF THE FOLLOWING SUBJECTS--CHEMISTRY, GEOLOGY, MATHEMATICS, PHILOSOPHY. IF TWO SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

INDIVIDUAL INSTRUCTION IS PROVIDED FOR SUPERIOR UNDERGRADUATE STUDENTS AT HOURS TO BE ARRANGED.

COURSES FOR GRADUATES

ASTR 499 THESIS RESEARCH
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

AVIATION

DEPARTMENT OFFICE 318 C E H

COURSES OFFERED BY THE INSTITUTE OF AVIATION ARE OPEN TO STUDENTS AND FACULTY IN ALL DEPARTMENTS OF THE UNIVERSITY, SUBJECT TO LIMITATIONS IMPOSED BY THE AVAILABILITY OF SPACE AND EQUIPMENT. CREDIT FOR INSTITUTE OF AVIATION COURSES IS GENERAL UNIVERSITY CREDIT. HOWEVER, ITS USE AS CREDIT TOWARD GRADUATION IS A MATTER FOR EACH COLLEGE TO PASS UPON. COURSES IN THE 150, 160, AND 170 SERIES ORDINARILY GIVE CREDIT ONLY IN THE INSTITUTE OF AVIATION.

THE FEE FOR EACH INSTITUTE OF AVIATION FLIGHT COURSE IS $350. BUS TRANSPORTATION TO AND FROM THE AIRPORT FOR AVIATION STUDENTS IS PROVIDED BY THE INSTITUTE WITHOUT CHARGE. ARRANGEMENTS FOR THE PHYSICAL EXAMINATION FOR STUDENTS IN AVI. 101 ARE MADE BY THE INSTITUTE THROUGH THE UNIVERSITY HEALTH SERVICE UPON FINAL ACCEPTANCE IN THE PRIVATE PILOT COURSE AT REGISTRATION TIME. STUDENTS IN AVI. 104 ARE REQUIRED TO POSSESS A SECOND-CLASS F.A.A. MEDICAL CERTIFICATE DATED WITHIN THE PRECEDING TWELVE CALENDAR MONTHS.

STUDENTS ARE CAUTIONED THAT ALL TIMES AT THE AIRPORT LISTED IN THE FOLLOWING SCHEDULES REFER TO AIRBORNE TIME AND THAT A MINIMUM OF 30 MINUTES MUST BE ALLOWED FOR TRAVELING TO THE AIRPORT PRIOR TO EACH FLIGHT AND FOR RETURNING TO THE CAMPUS AFTER EACH FLIGHT. THE BUS SCHEDULE AND ROUTE FROM AIRPORT TO CAMPUS IS LISTED SEPARATELY, IMMEDIATELY FOLLOWING THE COURSE LISTINGS.
FOR CONVENIENCE IN ARRANGING PROGRAM CARDS SO THAT
TRAVEL TIME TO AND FROM THE AIRPORT WILL NOT CAUSE OVERLAPPING OF CLASSES, THE BUS SCHEDULE IS COMBINED WITH THE FLIGHT SECTION TIMES AS FOLLOWS-THE COLUMN LABELED--LEAVE CAMPUS--INDICATES THE TIME THE BUS DEPARTS FOR THE AIRPORT. THE COLUMN LABELED--HOURS--INDICATES AIRBORNE TIME FROM GROUND TO GROUND. THE COLUMN LABELED--ARRIVE CAMPUS--LISTS THE TIME STUDENTS MAY EXPECT TO BE BACK ON THE CAMPUS.

COURSES FOR UNDERGRADUATES

AVI 102 AND 103, OR 103 AND 104, OR 104 AND 205 MAY BE TAKEN CONCURRENTLY BY SPECIAL PERMISSION.

AVI 101 PRIVATE PILOT.
PREPARES THE BEGINNING FLIGHT STUDENT FOR A F.A.A. PRIVATE PILOT CERTIFICATE. AIRPLANE UTILITY AND SAFETY ARE EMPHASIZED. FORTY-EIGHT CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL--INSTRUCTION ON CIVIL AIR REGULATIONS, AIR NAVIGATION, RADIO, METEOROLOGY, AND GENERAL SERVICE OF AIRCRAFT, 13 HOURS OF FLIGHT DISCUSSION, 11 HOURS OF LINK TRAINING AND 38 HOURS OF FLIGHT TRAINING IN VARIOUS MAKES OF AIRPLANES.
3 HOURS
LECT-DISC 750-850 MTUWTHF 11 AERO LAB B HAAK
THE FOLLOWING FLIGHT SECTIONS ARE AVAILABLE FOR AVI. 101 STUDENTS WITH THE EXCEPTION OF A2--

FLIGHT	HOURS	DAYS	LEAVE CAMPUS	ARRIVE CAMPUS	INSTRUCTOR
A2	8.00- 9.00	MTUWTHFS	7.30 A.M.	9.45 A.M.	BENN AND STAFF
A3	9.20-10.20	MTUWTHFS	8.55	10.55	
A4	10.40-11.40	MTUWTHFS	10.05	12.45 P.M.	
A5	12.20- 1.20	MTUWTHF	12.00	1.55	
A6	1.40- 2.40	MTUWTHF	1.10 P.M.	3.20	
A7	3.00- 4.00	MTUWTHF	2.20	4.45	
A8	4.30- 5.30	MTUWTHF	4.00	5.55	

AVI 102 SECONDARY FLIGHT.
THE SECOND PHASE OF FLIGHT TRAINING IN PREPARATION FOR A F.A.A. COMMERCIAL PILOT CERTIFICATE. THE PURPOSE IS TO DEVELOP FURTHER THE QUALITIES OF A GOOD PILOT. AEROBATICS ARE EMPHASIZED. ADDITIONAL GROUND-SCHOOL INSTRUCTION IN METEOROLOGY AND AIRCRAFT ENGINES IS PRESENTED. FORTY-EIGHT CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL--WORK AND 44 HOURS OF FLIGHT TRAINING--16 DUAL AND 28 SOLO--IN TWO-PLACE SIDE-BY-SIDE MONOPLANES AND TWO-PLACE TANDEM BIPLANES. PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC	9-10	MTUWTHF	11	AERO LAB B TRULOCK

THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 102 STUDENTS. WITH THE EXCEPTION OF FLIGHTS A2 AND A3.

GORDON AND STAFF

AVI 103 INTERMEDIATE FLIGHT.
THE THIRD PHASE OF FLIGHT TRAINING IN PREPARATION FOR A F.A.A. COMMERCIAL PILOT CERTIFICATE. EMPHASIS IS PLACED ON CROSS-COUNTRY, NIGHT, AND INSTRUMENT FLYING. FORTY-EIGHT CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL--INSTRUCTION IN CROSS-COUNTRY FLIGHT INCLUDING NAVIGATION AND RADIO COMMUNICATIONS, AND 44 HOURS OF FLIGHT TRAINING--17 DUAL AND 27 SOLO--IN TWO-PLACE SIDE-BY-SIDE RADIO-EQUIPPED AIRCRAFT AND TWO-PLACE TANDEM MONOPLANES. THIS COURSE MAY BE TAKEN BY PRIVATE PILOTS WHO WISH TO INCREASE THEIR CROSS-COUNTRY AND NIGHT-FLYING PROFICIENCY. PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE AND CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC	12-1	MTUWTHF	11	AERO LAB B HAAK

FLIGHT	HOURS	DAYS	LEAVE CAMPUS	ARRIVE CAMPUS	INSTRUCTOR
A1	7.45-11.30	M TH	7.30 A.M.	11.45 A.M.	
A2	1.40- 5.40	M TH	1.10 P.M.	5.55 P.M.	
A3	7.45-11.30	TU F	7.30 A.M.	11.45 A.M.	
A4	1.40- 5.40	TU F	1.10 P.M.	5.55 P.M.	
A5	7.45-11.30	W S	7.30 A.M.	11.45 A.M.	

AVI 104 ADVANCED FLIGHT.
THE FINAL PHASE OF FLIGHT TRAINING IN PREPARATION FOR A F.A.A. COMMERCIAL PILOT CERTIFICATE. EMPHASIS IS PLACED ON PRECISION FLYING FORTY-EIGHT CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL--INSTRUCTION DEVOTED TO AIRCRAFT AND A REVIEW OF CIVIL AIR REGULATIONS, AIR NAVIGATION, METEOROLOGY, AIRCRAFT ENGINES, AND RADIO COMMUNICATIONS IN PREPARATION FOR A COMMERCIAL PILOT CERTIFICATE, AND 44 HOURS OF FLIGHT TRAINING--14 DUAL AND 30 SOLO--IN TWO-PLACE TANDEM MONOPLANES, OR FOUR-PLACE MONOPLANES. PREREQUISTIE--AVI. 102 AND 103, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC A	11-12	MTUWTHF	11	AERO LAB B HAAK
LECT-DISC B	1-2	MTUWTHF	11	AERO LAB B HAAK

THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 104 STUDENTS.

GORDON AND STAFF

COURSES FOR ADVANCED UNDERGRADUATES

AVI 205 FLIGHT INSTRUCTOR.
PREPARES THE COMMERCIAL PILOT FOR A F.A.A. FLIGHT INSTRUCTOR CERTIFICATE. FORTY-EIGHT CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL INSTRUCTION ON TECHNIQUES OF FLIGHT INSTRUCTION AND THEORY OF FLIGHT AND A MINIMUM OF 26 HOURS OF FLIGHT TRAINING--20 DUAL AND 6 SOLO--IN TWO-PLACE TANDEM AIRCRAFT. PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC	1040-1140	MTUWTHF	AIRPORT	STONECIPHER AND STAFF

THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 205 STUDENTS WITH THE EXCEPTION OF FLIGHT A4.

AVI 207 ADVANCED INSTRUMENT FLIGHT PROCEDURES.
SECOND AND FINAL COURSE LEADING TO A F.A.A. INSTRUMENT RATING. FORTY-EIGHT CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL--TRAINING ON INSTRUMENT FLIGHT PUBLICATIONS AND REFERENCES. F.A.A. AIR TRAFFIC CONTROL SYSTEM. ADVANCED AVIATION METEOROLOGY. AND PREPARATION FOR THE F.A.A. EXAMINATION FOR INSTRUMENT RATING. 20-25 HOURS OF SIMULATED INSTRUMENT FLIGHT. AND 10-12 HOURS OF INSTRUMENT LINK TRAINING. PREREQUISITE--AVIATION 206 OR 40 HOURS OF SIMULATED INSTRUMENT FLIGHT EXPERIENCE. JUNIOR STANDING CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC	750-850	MTUWTHF	5	AERO LAB B	ANDERSON AND STAFF

THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 207 STUDENTS WITH THE EXCEPTION OF FLIGHT A2.

AVI 291 SPECIAL RATING--MULTI-ENGINE SEA.
PREPARES THE COMMERCIAL PILOT FOR A FEDERAL AVIATION AGENCY MULTI-ENGINE SEAPLANE RATING. 16 HOURS OF PREFLIGHT--GROUND SCHOOL INSTRUCTION AND 15 HOURS OF FLIGHT TRAINING IN A MULTI-ENGINE SEAPLANE. PREREQUISITE--COMMERCIAL PILOT CERTIFICATE. PERMISSION OF THE DIRECTOR.
1 HOUR

LAB-DISC	ARR	AIRPORT	STONECIPHER AND STAFF

AVI 292 SPECIAL RATING--MULTI-ENGINE LAND.
PREPARES THE COMMERCIAL PILOT FOR AN F.A.A. MULTI-ENGINE LAND AIRPLANE RATING. SIXTEEN CLASSROOM HOURS OF PREFLIGHT--GROUND SCHOOL--INSTRUCTION AND 15 HOURS OF FLIGHT TRAINING IN A MULTI-ENGINE LAND AIRPLANE. PREREQUISITE--COMMERCIAL PILOT CERTIFICATE. CONSENT OF DIRECTOR.
1 HOUR

LAB-DISC	ARR	AIRPORT	STONECIPHER AND STAFF

BUS SCHEDULE AND ROUTE

THE INSTITUTE OF AVIATION BUS MAKES REGULAR TRIPS BETWEEN THE AIRPORT AND THE CAMPUS BEGINNING ON THE FIRST DAY OF CLASSES AND CONTINUING THROUGH THE LAST DAY OF FINAL EXAMINATIONS. THE BUS LEAVES FROM THE CAMPUS PARKING SPOT AT THE NORTHEAST CORNER OF AERO LAB B. AND MAKES REGULAR STOPS ON THE WAY TO THE AIRPORT AT THE CORNERS OF WRIGHT AND ARMORY STREETS. FOURTH AND GREGORY STREETS AND FIRST AND GREGORY STREETS. THE TRIP FROM THE AIRPORT BACK TO THE CAMPUS IS VIA GREGORY STREET AND GOODWIN AVENUE TO THE PARKING SPOT. THE SCHEDULE IS AS FOLLOWS--

LEAVE CAMPUS--ARRIVE AIRPORT		LEAVE AIRPORT--ARRIVE CAMPUS	
7.30 A.M.	7.45 A.M.	7.50 A.M.	8. 5 A.M.
8.55	9.10	9.30	9.45
10.05	10.20	10.40	10.55
11.05	11.20	11.30	11.45
12.00	12.15 P.M.	12.30 P.M.	12.45 P.M.
1.10 P.M.	1.25	1.40	1.55
2.20	2.35	3.05	3.20
4.00	4.15	4.30	4.45
5.00	5.15	5.40	5.55

AVIATION
AIRCRAFT MAINTENANCE

AVI 161 AIRPORT SHOP MANAGEMENT.
SHOP SAFETY. PURCHASING. RECORD KEEPING. INVENTORIES. ACCOUNTING. JOB ESTIMATES. AND FOREMANSHIP.
3 HOURS

LECT-DISC	920-1010	MTUWTHF	AIRPORT	BAILEY

AVI 168 PROBLEMS OF AIRCRAFT MAINTENANCE.
GROUP DISCUSSIONS AND REPORTS ON CURRENT PROBLEMS OF AIRCRAFT MAINTENANCE. PREREQUISITE--SOPHOMORE STANDING.
2 HOURS
LECT-DISC 8-10 TU F AIRPORT APPLEGATE

BANDS

DEPARTMENT OFFICE 140 BAND

THE SUMMER SESSION BAND IS OPEN TO STUDENTS WHO HAVE BEEN MEMBERS OF THE UNIVERSITY BANDS DURING THE ACADEMIC YEAR, AND TO OTHER STUDENTS, BOTH MEN AND WOMEN, WHO MAY QUALIFY BY PLAYING EXAMINATION. FINAL SELECTION OF MEMBERSHIP IS BY INSTRUMENTATION AND PROFICIENCY. CANDIDATES SHOULD REPORT TO THE BANDS OFFICE, 140 BAND BUILDING, DURING THE REGISTRATION PERIOD FOR ENROLLMENT AND/OR APPOINTMENTS FOR AUDITIONS. REHEARSALS WILL BE HELD FROM 7--15 TO 8--45 P.M. TUESDAY AND WEDNESDAY IN THE BAND BUILDING, AND A SERIES OF TWILIGHT CONCERTS WILL BE SCHEDULED.
MR. GUY M. DUKER.

BIOPHYSICS

DEPARTMENT OFFICE 524 BURRILL HALL

COURSES FOR GRADUATES

BIOPH 411 SEMINAR
SURVEY OF THE LITERATURE IN ONE AREA OF BIOPHYSICS WITH SPECIAL EMPHASIS ON STUDENT REPORTS. PREREQUISITE--ENROLLMENT IN THE BIOPHYSICS PROGRAM OR CONSENT OF INSTRUCTOR.
1/2 UNIT
ARR STAFF

BIOPH 499 THESIS RESEARCH.
RESEARCH MAY BE CONDUCTED IN ANY OF SEVERAL AREAS, SUBJECT TO APPROVAL OF THE STAFF MEMBER CONCERNED AND THE DEPARTMENT IN WHICH THE RESEARCH IS TO BE DONE.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR STAFF

BOTANY

DEPARTMENT OFFICE 208 N H

MAJOR--TWENTY HOURS OF BOTANY, EXCLUDING BOT. 100, D G S 131, 132, AND BIOL. SCI. 100, AND INCLUDING BOT. 120, OR 302 OR 303 OR 304, 160, AND 330, AND AT LEAST FIVE HOURS IN OTHER COURSES LISTED FOR ADVANCED UNDERGRADUATES AND GRADUATES.

MINORS--TWENTY HOURS IN ONE OR TWO SUBJECTS CHOSEN IN CONSULTATION WITH THE CHAIRMAN OF THE DEPARTMENT FROM THE FOLLOWING--AGRONOMY, CHEMISTRY, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, HORTICULTURE, MATHEMATICS MICROBIOLOGY, PHYSICS, PHYSIOLOGY, PLANT PATHOLOGY, AND ZOOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

IF HORTICULTURE IS CHOSEN AS A MINOR, NOT MORE THAN TEN HOURS MAY BE COUNTED. THE TEN HOURS MAY BE CHOSEN FROM HORT. 100, 110, 121, 201, 230 OR 233, 242, 262, 307 OR 308, 321 OR 322, 367, AND 382.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

BOT 300 INDIVIDUAL TOPICS.
FOR SENIORS AND FIRST-YEAR GRADUATE STUDENTS DESIRING TO STUDY INDIVIDUAL PROBLEMS AND TOPICS NOT ASSIGNED IN OTHER COURSES. UNDERGRADUATES MAY NOT OFFER MORE THAN FIVE HOURS IN BOT. 300 TOWARD THE BACHELORS DEGREE, NOR GRADUATE STUDENTS MORE THAN ONE UNIT IN BOT. 300 TOWARD THE MASTERS DEGREE. PREREQUISITE--BOT. 100, TEN HOURS OF ADVANCED WORK IN BOTANY OR ANOTHER BIOLOGICAL SCIENCE, SENIOR STANDING.
2 TO 5 HOURS, OR 1/4 OR 1/2 UNIT
CONF ARR STAFF

BOT 304 GENERAL PLANT MORPHOLOGY.
A SURVEY OF THE PRINCIPLES OF PLANT MORPHOLOGY AS EXEMPLIFIED BY THE VARIOUS PLANT GROUPS. MODIFICATION OF COURSE WILL BE MADE TO MEET THE NEEDS OF TEACHERS AND PROSPECTIVE TEACHERS DURING THE SUMMER. PREREQUISITE--BOT. 100 OR D.G.S. 131 AND 132, OR EQUIVALENT. SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 OR 5 HOURS, OR 1/2 OR 1 UNIT
LAB-DISC 8-10 MTUWTHFS 201 H H CAROTHERS

BOT 366 FIELD BOTANY.
IDENTIFICATION AND CLASSIFICATION OF NATIVE AND NATURALIZED FLOWERING PLANTS OF EASTERN NORTH AMERICA. PREREQUISITE--ONE COURSE IN BOTANY, CONSENT OF INSTRUCTOR.
3 OR 5 HOURS, OR 1/2 OR 1 UNIT
FIELD WORK TWO HOURS TO BE ARRANGED
LAB-DISC 1-3 MTUWTHF 258 N H B SMITH

BOT 372 GENERAL MYCOLOGY.
STRUCTURE, CLASSIFICATION, AND IDENTIFICATION OF FUNGI, INCLUDING THOSE OF ECONOMIC IMPORTANCE. PREREQUISITE--ONE YEAR OF BOTANY, ENTOMOLOGY, MICROBIOLOGY, OR ZOOLOGY, SENIOR STANDING, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT
LAB-DISC 10-12 MTUWTHFS 408 N H B ROGERS

COURSES FOR GRADUATES

BOT 493 ADVANCED STUDIES IN BOTANY.
NOT MORE THAN ONE UNIT MAY BE APPLIED TOWARD THE GRADUATE COLLEGE MASTERS DEGREE REQUIREMENT OF 3 UNITS OF COURSE WORK AT THE 400 LEVEL. WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--
1/2 TO 2 UNITS

A--ANATOMY--PLANT	CAROTHERS, PAOLILLO
B--CYTOGENETICS	STEFFENSEN
C--CYTOLOGY	STEFFENSEN
D--ECOLOGY--PLANT	BLISS
E--GENETICS--PLANT	LAUGHNAN
F--MORPHOLOGY--HIGHER VASCULAR PLANTS	CAROTHERS, PAOLILLO
G--MORPHOLOGY--PRIMITIVE VASCULAR PLANTS	STEWART
H--MYCOLOGY	ROGERS
I--PALEOBOTANY	DELEVORYAS, KOSANKEY STEWART, PHILLIPS
J--PHOTOSYNTHESIS	RABINOWITCH, GOVINDJEE
L--PHYSIOLOGY--PLANT	NANCE, STERN
M--TAXONOMY OF BRYOPHYTES	JONES
N--TAXONOMY OF VASCULAR PLANTS	JONES, SMITH
O--VIROLOGY--PLANT	

CONF ARR STAFF

BOT 499 THESIS RESEARCH.
INDIVIDUAL WORK UNDER SUPERVISION OF MEMBERS OF THE STAFF IN THEIR RESPECTIVE FIELDS.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

BUSINESS

DEPARTMENT OFFICE 124 D K H

COURSES FOR GRADUATES

BUS 499 THESIS RESEARCH--I, II.
REQUIRED OF ALL STUDENTS WRITING DOCTORS THESIS IN BUSINESS. INDIVIDUAL DIRECTION AND GUIDANCE AND SEMINAR DISCUSSIONS OF PROGRESS MADE.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR BEDFORD

BUSINESS ADMINISTRATION

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION--214 DAVID KINLEY HALL

COURSES FOR GRADUATES

B ADM 590 INDEPENDENT STUDY AND RESEARCH.
DIRECTED READING AND RESEARCH.
1/2 TO 1 UNIT
ARR STAFF

B ADM 599 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR STAFF

BUSINESS EDUCATION

DEPARTMENT OFFICE 9 D K H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ED 351 IMPROVEMENT OF INSTRUCTION IN SHORTHAND.
A STUDY OF THE HISTORY, PRINCIPLES, AND PRACTICES OF SHORTHAND INSTRUCTION INCLUDING EVALUATION OF LITERATURE, RESEARCH, AND METHODS OF TEACHING. ATTENTION GIVEN TO THE USE OF COMMUNITY RESOURCES, SELECTION OF STUDENTS, TESTING, GRADING, JOB STANDARDS, AND JOB ADJUSTMENT. PREREQUISITE--SIXTEEN HOURS IN COMMERCE, INCLUDING B.ED. 112--SIXTEEN HOURS IN EDUCATION, INCLUDING ED. 242.
2 HOURS, OR 1/2 UNIT
*SECTION E MEETS THE FIRST FOUR WEEKS
LECT-DISC *E 1-3 TUWTHF 10 D K H MILDRED REED

B ED 352 IMPROVEMENT OF INSTRUCTION IN TYPEWRITING.
A STUDY OF THE HISTORY, PRINCIPLES, AND PRACTICES OF TYPEWRITING INSTRUCTION, INCLUDING EVALUATION OF LITERATURE, RESEARCH, AND METHODS OF TEACHING. ATTENTION IS GIVEN TO THE USE OF COMMUNITY RESOURCES SELECTION OF STUDENTS, TESTING, GRADING, JOB STANDARDS, AND JOB ADJUSTMENT. PREREQUISITE--SIXTEEN HOURS IN COMMERCE, INCLUDING B.ED. 203 AND SIXTEEN HOURS IN EDUCATION, INCLUDING ED. 242.
2 HOURS, OR 1/2 UNIT
LECT-DISC A 8 TUWTHF 10 D K H MELSON

B ED 383 PROBLEMS IN COOPERATIVE EDUCATION.
STUDENTS APPLY FOR AND SECURE DISTRIBUTIVE OR OFFICE POSITIONS WITH SELECTED COOPERATING BUSINESS FIRMS. WHILE REGULARLY EMPLOYED IN THESE SUPERVISED POSITIONS, THEY OBSERVE THE RELATIONSHIPS BETWEEN THOSE ACTIVITIES AND THE COOPERATIVE BUSINESS EDUCATION PROGRAMS IN THE HIGH SCHOOL. THESE RELATIONSHIPS ARE POINTED UP THROUGH REGULARLY SCHEDULED CLASS MEETINGS WHERE EMPHASIS IS PLACED ON JOB ANALYSIS, CURRENT TRENDS, WAGE AND BENEFIT STRUCTURE PERSONNEL PRACTICES, AND LABOR RELATIONS. PREREQUISITE--16 HOURS IN EDUCATION AND 16 IN COMMERCE.
4 HOURS, OR 1 UNIT

THIS IS AN EXTRAMURAL COURSE--PROBLEMS IN COOPERATIVE EDUCATION

COURSES FOR GRADUATES

SEE ED. 456 -- BUSINESS EDUCATION SECTION
SEE ED. 459 -- FAMILY FINANCE SECTION
SEE ED. 459 -- AUTOMATION SECTION
SEE ED. 459 -- BASIC BUSINESS AND ECONOMIC ED. SECTION

B ED 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN B.ED.
1/2 TO 2 UNITS
DISC ARR CONDON

BUSINESS LAW

DEPARTMENT OFFICE 431 D K H

COURSES FOR UNDERGRADUATES

B LAW 100 BASIC PRINCIPLES OF BUSINESS LAW.
NON-COMMERCE STUDENTS SEE B.LAW 261. CREDIT TOWARD GRADUATION IS NOT GIVEN FOR B.LAW 201 OR 261 IN ADDITION TO B.LAW 100. SEE B. LAW 202 FOR PROVISIONAL REDUCED CREDIT. PREREQUISITE--ACCY. 105, ECON. 102, FORTY-FIVE CREDIT HOURS.
3 HOURS
LECT-DISC A 8 MTUWTHFS 328 D K H KIRKPATRICK

COURSES FOR ADVANCED UNDERGRADUATES

B LAW 202 GENERAL PRINCIPLES OF BUSINESS LAW.
CONTINUATION OF BUS. LAW 201. PREREQUISITE--BUS. LAW 201.
*BUS. LAW 100 IS ACCEPTED AS A PREREQUISITE BUT IN SUCH CASES BUS. LAW 202 CARRIES ONLY 2 HOURS CREDIT.
*2 OR 3 HOURS
LECT-DISC B 9 MTUWTHFS 328 D K H KIRKPATRICK

B LAW 261 SUMMARY OF BUSINESS LAW.
AVAILABLE ONLY FOR NON-COMMERCE STUDENTS WHO HAVE AT LEAST JUNIOR STANDING.
3 HOURS
LECT-DISC A 8 MTUWTHFS 328 D K H KIRKPATRICK

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B LAW 301 THE LAW OF SECURITY TRANSACTIONS AND BANKING.
PREREQUISITE--SENIOR STANDING. BUS. LAW 100 OR CREDIT OR REGISTRATION IN BUS. LAW 202.
3 HOURS. OR 3/4 TO 1 UNIT
LECT-DISC C 10 MTUWTHFS 328 D K H ROBERTS

CERAMIC ENGINEERING

DEPARTMENT OFFICE 204 CER

COURSES FOR GRADUATES

CER E 495 MATERIALS AND SPECIAL PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
1 TO 2 UNITS
CONF ARR STAFF

CER E 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

CHEMISTRY AND CHEMICAL ENGINEERING

DEPARTMENT OFFICE 108 N L

MAJOR--NOT LESS THAN TWENTY HOURS IN CHEMISTRY. EXCLUDING CHEM. 101. 102. 104. 105. 107. 108. 109. AND 111. ONE SEMESTER OF BASIC WORK IN EACH OF THE FOLLOWING AREAS MUST BE INCLUDED--QUANTITATIVE ANALYSIS. ORGANIC CHEMISTRY. AND PHYSICAL CHEMISTRY. IN ADDITION THERE MUST BE INCLUDED TWO APPROVED 300 LEVEL COURSES. ONE IN EACH OF TWO AREAS OF CHEMISTRY. THESE TWO COURSES MUST HAVE THE APPROVAL OF THE DEPARTMENTAL ADVISER. IT IS VERY DESIRABLE THAT THE STUDENT PLAN HIS COURSE WORK AS EARLY AS POSSIBLE IN CONSULTATION WITH HIS ADVISER.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS. WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY. CERAMIC ENGINEERING. ENTOMOLOGY. GEOLOGY. MATHEMATICS. MICROBIOLOGY. PHILOSOPHY. PHYSICS. PHYSIOLOGY. PSYCHOLOGY. AND ZOOLOGY. WITH THE WRITTEN APPROVAL OF THE DEPARTMENTAL ADVISER. OTHER SUBJECTS MAY BE SUBSTITUTED.

DEPARTMENTAL DISTINCTION--STUDENTS IN CHEMISTRY REGISTERED IN CHEM. 290--THESIS--OR STUDENTS IN CHEMICAL ENGINEERING REGISTERED IN CH. E. 290--THESIS--OR 379--PROJECTS--OR 381--PLANT DESIGN--BECOME CANDIDATES FOR DEPARTMENTAL DISTINCTION. ALL STUDENTS ARE ELIGIBLE FOR COLLEGE HONORS WHO HAVE A 4.0 AVERAGE OR BETTER. THE LEVEL OF DISTINCTION TO BE RECOMMENDED IS DETERMINED BY THE QUALITY OF THE SPECIAL WORK DONE IN ADDITION TO THE REQUIREMENT THAT THE OVER-ALL GRADE-POINT AVERAGES. EXCLUSIVE OF MILITARY TRAINING AND PHYSICAL EDUCATION. OF A 4.0. 4.25. AND 4.5 ARE REQUIRED FOR THE CITATIONS OF DISTINCTION. HIGH DISTINCTION. AND HIGHEST DISTINCTION. RESPECTIVELY RECOMMENDATION IS MADE TO THE DEAN OF THE COLLEGE BY THE HEAD OF THE DEPARTMENT.

SEQUENCE OF COURSES--STUDENTS IN THE CURRICULUM IN CHEMISTRY, MAJORS IN CHEMISTRY, AND ALL OTHERS WHO DESIRE A THOROUGH TRAINING IN THE FUNDAMENTALS OF CHEMISTRY AND THEIR APPLICATIONS TO MODERN LIFE SHOULD SELECT COURSES FROM THE FOLLOWING, USUALLY IN THE SEQUENCE GIVEN--CHEM. 107, 108, 234, 336, 342, 343, 344, 345, 321, 315, AND COURSES IN BIOCHEMISTRY, CHEMICAL ENGINFERING, ANALYTICAL, INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY. STUDENTS WHO DO NOT MEET THE REQUIREMENTS OF PREVIOUS HIGH SCHOOL CHEMISTRY AND THE THOROUGH MATHEMATICS BACKGROUND NECESSARY FOR REGISTRATION IN CHEM. 107, MAY REGISTER IN CHEM. 101 OR 102 BEFORE TAKING THE SEQUENCE CHEM. 107 AND 108. STUDENTS IN THE COLLEGE OF ENGINEERING--EXCEPT CERAMISTS, CERAMIC ENGINEERS, AND THOSE WHO WISH TO TAKE CHEM. 342--SHOULD REGISTER IN CHEM. 101 OR 102, 104, 123, OR IN 109 AND 123.

STUDENTS WHO WISH TO SATISFY A LIMITED CHEMISTRY REQUIREMENT MAY REGISTER FOR THE SEQUENCE CHEM. 101 OR 102, 105, 122, 132, OR 133. STUDENTS WITH EXCEPTIONALLY GOOD RECORDS MAY TAKE 109 INSTEAD OF 102 AND 105.
BIOCHEMISTRY--STUDENTS WHO WISH TO SPECIALIZE IN BIOCHEMISTRY ARE DIRECTED TO THE CHEMISTRY CURRICULUM OR TO A STRONG CHEMISTRY MAJOR PROGRAM. SUCH STUDENTS SHOULD PLAN THEIR PROGRAMS SO AS TO INCLUDE, IN ADDITION TO CHEMISTRY AND BIOCHEMISTRY, BASIC COURSES IN MATHEMATICS, THROUGH CALCULUS, AND PHYSICS, THROUGH PHYSICS 108, AND A YEAR OF ADVANCED UNDERGRADUATE BIOLOGY. STUDENTS IN RELATED FIELDS WISHING TO TAKE UNDERGRADUATE COURSES IN BIOCHEMISTRY ARE URGED TO PLAN THEIR PROGRAMS SO AS TO PROVIDE AN EQUIVALENT BACKGROUND. STUDENTS ARE ENCOURAGED TO DISCUSS THEIR PROGRAMS WITH THE STAFF OF THE DIVISION OF BIOCHEMISTRY OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING.

RESTRICTIONS--STUDENTS IN THE CURRICULA OF CHEMISTRY OR CHEMICAL ENGINEERING MUST HAVE AT LEAST A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, IN ORDER TO BE ACCEPTED BY THE DEPARTMENT AS JUNIORS OR SENIORS. A TRANSFER STUDENT TO BE ACCEPTED MUST HAVE A CORRESPONDING RECORD IN THE INSTITUTION OR INSTITUTIONS FROM WHICH HE TRANSFERS AND MUST MAINTAIN A SIMILAR AVERAGE AT THE UNIVERSITY OF ILLINOIS. WITH THE EXCEPTION OF STUDENTS IN THE COLLEGE OF ENGINEERING AND THE COLLEGE OF AGRICULTURE, REGISTRATION OF STUDENTS IN CHEMISTRY COURSES EXCEPT THOSE OF FRESHMAN AND SOPHOMORE GRADE, NAMELY, CHEM. 101, 102, 104, 105, 107, 108, 109, 111, 122, 123, 132, 133, NORMALLY IS RESTRICTED TO STUDENTS HAVING A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, OR AN AVERAGE OF AT LEAST 3.5 IN CHEMISTRY COURSES. ANY JUNIOR OR SENIOR WHO CANNOT MEET EITHER OF THESE REQUIREMENTS MUST PETITION FOR ADMITTANCE AS A MAJOR OR MINOR IN CHEMISTRY.

CHEMISTRY

COURSES FOR UNDERGRADUATES

CHEM 101 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL PHYSICS, OR TWO AND ONE-HALF UNITS OF HIGH SCHOOL MATHEMATICS, OR CREDIT IN MATH. 111, 112, OR 117. STUDENTS MAY REGISTER IN ANY LECTURE SECTION BUT ARE REQUIRED TO TAKE THE QUIZ AND LABORATORY IN SOME ONE SECTION.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT	2	MTUWTH	112	C	A	PFLUGER
QUIZ	1	MTUWTH	8	C	A	
LAB	10-12	MTUWTH	201	C	A	

CHEM 102 GENERAL CHEMISTRY.
FOR STUDENTS WHO HAVE HAD ONE YEAR OF HIGH SCHOOL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL CHEMISTRY OR EQUIVALENT, 2 1/2 UNITS OF HIGH SCHOOL MATHEMATICS OR CREDIT IN MATH. 111 OR 112. STUDENTS MAY REGISTER FOR ANY LECTURE SECTION BUT ARE REQUIRED TO TAKE THE QUIZ AND LABORATORY IN SOME ONE SECTION. NOTE--STUDENTS WHOSE PREPARATION IN CHEMISTRY IS INADEQUATE ARE ADVISED TO REGISTER IN CHEM. 101 RATHER THAN CHEM. 102.
*SENIORS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT	2	MTUWTH	112	C A	PFLUGER
QUIZ	1	MTUWTH	101	E C	
LAB	10-12	TU TH	201	C A	

CHEM 122 ELEMENTARY QUANTITATIVE ANALYSIS.
GRAVIMETRIC AND VOLUMETRIC ANALYSIS. STOICHIOMETRICAL RELATIONS. PRACTICAL APPLICATIONS. FOR ALL STUDENTS IN HOME ECONOMICS AND PREMEDICAL COURSES AND ALL OTHERS WHO HAVE NOT FOLLOWED THE SEQUENCE CHEM. 101 OR 102, 107 AND 108. PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

LECT	8	M TH	201	N L	BROWNLEE
QUIZ	8	TUW FS	201	N L	
LAB	9-12	MTUWTHFS	301	C A	

CHEM 123 QUANTITATIVE ANALYSIS FOR ENGINEERS.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

LECT	8	M TH	201	N L	BROWNLEE
QUIZ	8	TUW FS	201	N L	
LAB	9-12	MTUWTHFS	301	C A	

CHEM 132 ELEMENTARY ORGANIC CHEMISTRY.
THIS COURSE DOES NOT SATISFY ORGANIC CHEMISTRY PREREQUISITE FOR CHEM. 350, 354, OR 355. PREREQUISITE--CHEM. 101, 102, 109, OR EQUIVALENT.
3 HOURS

LECT	8	TUWTHF	217	N L	BEAK
QUIZ	1	TU TH	161	N L	
LAB	2-5	TU TH	467	N L	

COURSES FOR ADVANCED UNDERGRADUATES

CHEM 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMISTRY CURRICULUM
PREREQUISITE--MAJORS IN CHEMISTRY IN THE GENERAL CURRICULUM MAY REGISTER IF THEY HAVE COMPLETED A MINIMUM OF TWENTY-THREE HOURS OF CHEMISTRY, WHICH MUST INCLUDE AT LEAST FIVE HOURS FROM THE COURSES FOR ADVANCED UNDERGRADUATES. OTHER STUDENTS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT WHO DESIRES TO DO RESEARCH MUST RECEIVE SPECIAL WRITTEN PERMISSION FROM THE INSTRUCTOR UNDER WHOM HE WISHES TO WORK. SUCH WRITTEN PERMISSION SHOULD BE PRESENTED, AT THE TIME OF REGISTRATION, TO THE ADVISER FOR THE CHEMISTS. EACH STUDENT TAKING THIS COURSE MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. IN ORDER TO RECEIVE CREDIT A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CHEM. 290.
2 TO 6 HOURS

ARR		STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CHEM 315 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN PHYSICAL CHEMISTRY.
3 HOURS, OR 3/4 UNIT

LECT	11	MTUWTHF	161	N L
	4	TU	161	N L

CHEM 316 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN CHEM. 315.
2 HOURS, OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

CONF		4	TH	8	C A		
LAB		*1-4	M F	305	N L		

CHEM 327 SPECIAL AND INSTRUMENTAL METHODS OF ANALYSIS.
PREREQUISITE--CHEM. 234, 342, AND 343, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

LECT		9	MTUWTH	301	N L	MALMSTADT
LAB	A1	10-12	M W	305	N L	
	A1	1-3	M W	305	N L	
LAB	A2	10-12	M W	308	N L	
	A2	1-3	M W	308	N L	
LAB	B1	10-12	TU TH	305	N L	
	B1	1-3	TU TH	305	N L	
LAB	B2	10-12	TU TH	308	N L	
	B2	1-3	TU TH	308	N L	

CHEM 336 ORGANIC CHEMISTRY.
SECOND COURSE. PREREQUISITE--CHEM. 234.
3 HOURS, OR 3/4 UNIT

LECT	9	MTUWTHF	112	C A	KNOWLES
DISC	1	M	112	C A	

CHEM 337 ORGANIC CHEMISTRY LABORATORY.
PREREQUISITE--CHEM. 234, CREDIT OR REGISTRATION IN CHEM. 336.
2 HOURS, OR 1/2 UNIT

CONF	8	TU TH	103	N L	
LAB	1-6	TU TH	218	N L	

CHEM 338 SYSTEMATIC IDENTIFICATION OF ORGANIC COMPOUNDS.
PREREQUISITE--CHEM. 336 AND 337, OR EQUIVALENT.
3 HOURS, OR 3/4 UNIT

CONF	8	M W F	8	C A	
	1	M	103	N L	
LAB	1-6	TU TH	218	N L	

CHEM 343 PHYSICAL CHEMISTRY LABORATORY.
PREREQUISITE--CHEM. 342.
1 HOUR, OR 1/4 UNIT

LAB	ARR		124	N L	GRUBB

CHEM 344 PHYSICAL CHEMISTRY.
CONTINUATION OF CHEM. 342. PREREQUISITE--CHEM. 342.
3 HOURS, OR 3/4 UNIT

LECT	10	MTUWTHFS	103	N L	GRUBB

CHEM 345 PHYSICAL CHEMISTRY LABORATORY.
CONTINUATION OF CHEM. 343. PREREQUISITE--CHEM. 342, CREDIT OR REGISTRATION IN CHEM. 343 AND 344.
1 HOUR, OR 1/4 UNIT

LAB	ARR		116	N L	GRUBB

CHEM 350 GENERAL BIOCHEMISTRY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY AND CHEM. 133 OR 234, OR EQUIVALENTS. REGISTRATION IN CHEM. 355.
3 HOURS, OR 3/4 UNIT

LECT	8	MTUWTHFS	116	E C	

CHEM 355 BIOCHEMISTRY LABORATORY.
TO ACCOMPANY CHEM. 350. PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY, CHEM. 133 OR 234, OR EQUIVALENT, REGISTRATION IN CHEM. 350.
3 HOURS, OR 3/4 UNIT

LAB	9-12	MTUWTHF	318	E C	

CHEM 391 SPECIAL PROBLEMS IN HIGH SCHOOL CHEMISTRY.
DESIGNED TO STRENGTHEN THE CHEMICAL BACKGROUND OF HIGH SCHOOL TEACHERS AND TO INTEGRATE THE TEACHING OF HIGH SCHOOL AND COLLEGE CHEMISTRY COURSES. LECTURES, CONFERENCES, PROBLEMS, AND REPORTS. ADAPTABLE TO INDIVIDUAL NEEDS. PREREQUISITE--EXPERIENCE IN HIGH SCHOOL TEACHING IN CHEMISTRY.
2 TO 4 HOURS, OR 1/2 TO 1 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

LECT	2	MTUWTH	112	C A		KUBOTA
CONF	*3	MTUWTH	8	C A		KUBOTA

CHEM 393 THE STATUS OF MODERN CHEMISTRY.
LECTURES, DEMONSTRATIONS, DISCUSSIONS AND LITERATURE ASSIGNMENTS IN SPECIALIZED AREAS OF CHEMISTRY AND CHEMICAL ENGINEERING, INCLUDING ANALYTICAL, INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY, BIOCHEMISTRY AND CHEMICAL ENGINEERING. DESIGNED TO BROADEN AND STRENGTHEN THE BASE OF EXPERIENCE AND KNOWLEDGE OF HIGH SCHOOL TEACHERS. PREREQUISITE--COLLEGE DEGREE, HIGH SCHOOL CHEMISTRY TEACHER STATUS.
3 HOURS, OR 3/4 TO 1 UNIT

LECT	ARR					TILBURY IN CHARGE

COURSES FOR GRADUATES

CHEM 404 ADVANCED INORGANIC CHEMISTRY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN ONE OF THE LECTURE COURSES IN INORGANIC CHEMISTRY IN THE 400 SERIES.
1/4 TO 3/4 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

LAB	*ARR		305	N L		

CHEM 434 ADVANCED ORGANIC SYNTHESIS.
LECTURE AND LABORATORY.
1/2 TO 1 UNIT

LAB	ARR		218	N L		BEAK

CHEM 435 ORGANIC CHEMISTRY.
SEMINAR. PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 UNIT

LECT-DISC	10	W F	161	N L		YANG

CHEM 455 BIOCHEMISTRY.
SEMINAR. PREREQUISITE--CHEM. 350 AND 355, OR EQUIVALENT.
1/2 UNIT

LECT-DISC	10-12	TU TH	397	E C		MICKELSON

CHEM 499 THESIS RESEARCH.
A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RESEARCH IS REQUIRED TO PRESENT A THESIS. A THESIS IS ALWAYS REQUIRED OF STUDENTS WORKING TOWARD THE DEGREE OF DOCTOR OF PHILOSOPHY. NOT ALL CANDIDATES FOR THESIS WORK NECESSARILY ARE ACCEPTED. ANY STUDENT WHOSE MAJOR IS IN A DEPARTMENT OTHER THAN CHEMISTRY MUST RECEIVE PERMISSION FROM THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING TO REGISTER IN THIS COURSE.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS, SUBJECT TO THE APPROVAL OF ONE OF THE QUALIFIED STAFF MEMBERS-

ANALYTICAL CHEMISTRY . . .BROWNLEE, HARTLEY, JUVET, LAITINEN, MALMSTADT, PFLUGER

BIOCHEMISTRY . . . CARTER, CLARK, CONRAD, GUNSALUS, HAGER, HALL, HASTINGS, RUTTER, VESTLING, WOLD.

BIOPHYSICAL CHEMISTRY . . . DICKERSON, HALL, HASTINGS, STEINRAUF, VAN HOLDE, VESTLING, WOLD

INORGANIC CHEMISTRY . . . BAILAR, BROWN, DRAGO,
MOELLER, PIPER

ORGANIC CHEMISTRY . . . APPLEQUIST, BATES, CURTIN, FUSON, LEONARD,
MARTIN, RINEHART, SMITH, SNYDER

PHYSICAL CHEMISTRY . BELFORD, DICKERSON, DRICKAMER, FLYGARE,
GUTOWSKY, HALL, HUMMEL, KUPPERMANN, PHIPPS,
STEINRAUF, VAN HOLDE, WALL, YANKWICH

CHEMISTRY--
APPLIED ELECTROCHEMISTRY--ORGANIC AND INORGANIC . . . SWANN

RADIOCARBON CHEMISTRY . . . . . NYSTROM

RESEARCH FOR THE PH. D. IS ALSO OFFERED IN SPECIALIZED FIELDS OTHER THAN THOSE ILLUSTRATED ABOVE. STUDENTS WHO INTEND TO MAJOR IN CHEMISTRY IN ONE OF THESE SPECIAL FIELDS SHOULD CONSULT WITH THE PROFESSOR IN CHARGE OF THE THESIS AND WITH THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING IN REGARD TO THE PROGRAMS OF COURSES AND EXAMINATIONS.
ARR STAFF

CHEMICAL ENGINEERING

COURSES FOR ADVANCED UNDERGRADUATES

CH E 267 MEASUREMENTS AND INSTRUMENTATION.
LABORATORY. PREREQUISITE--ONE YEAR OF COLLEGE PHYSICS, CREDIT OR REGISTRATION IN MATH. 343 OR 345.
2 HOURS

CONF	1	M W	115 E C		PERLMUTTER
LAB	2-6	M W	201 E C		

CH E 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMICAL ENGINEERING CURRICULUM ANY OTHERS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. HOWEVER, CH. E. 397, TWO HOURS, MAY BE SUBSTITUTED FOR TWO OF THE FIVE HOURS REQUIRED IN CH. E. 290. IN ORDER TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CH. E. 290.
2 TO 6 HOURS
ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CH E 379 CHEMICAL ENGINEERING PROJECTS.
LABORATORY. PREREQUISITE--SENIOR STANDING IN CHEMISTRY OR CHEMICAL ENGINEERING.
2 HOURS, OR 1/2 UNIT

LAB	1-6	TU TH	294 E C		PERLMUTTER

COURSES FOR GRADUATES

CH E 488 HEAT TRANSMISSION.
ADVANCED COURSE. PREREQUISITE--CH. E 371, OR EQUIVALENT WITH CONSENT OF INSTRUCTOR.
3/4 UNIT

LECT	11	MTUWTH	115 E C		WESTWATER

CH E 499 THESIS RESEARCH.
A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RESEARCH IS REQUIRED TO WRITE A THESIS. A THESIS IS ALWAYS REQUIRED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY. NOT ALL CANDIDATES FOR THESIS WORK NECESSARILY ARE ACCEPTED. ANY STUDENT WHOSE MAJOR IS IN ANOTHER DEPARTMENT MUST RECEIVE PERMISSION FROM THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING TO REGISTER IN THIS COURSE.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR BAER, DRICKAMER, HANRATTY, PERLMUTTER, PETERS, QUINN, SWANN, WESTWATER

CIVIL ENGINEERING

DEPARTMENT OFFICE 203 C E H

COURSES FOR ADVANCED UNDERGRADUATES

C E 207 SURVEYING CAMP.
PRINCIPLES AND PRACTICE OF TOPOGRAPHIC ENGINEERING, ROUTE ENGINEERING, HYDROGRAPHIC SURVEYING, AND CONTROL SURVEYING. GIVEN IN SUMMER SURVEYING CAMP AT CAMP RABIDEAU, MINNESOTA.
PREREQUISITE--C. E. 101.
5 HOURS
2 FIVE-WEEK CONSECUTIVE SESSIONS AT CAMP RABIDEAU, BLACKDUCK, MINNESOTA
A JUNE 18 THROUGH JULY 21
B JULY 23 THROUGH AUGUST 25
LAB-DISC ARR

C E 262 THEORY OF INDETERMINATE STRUCTURES.
PREREQUISITE--C.E. 261.
3 HOURS
LECT-DISC E 8 MTUWTHFS 305 CEH

C E 263 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--T.A.M. 224. CREDIT OR REGISTRATION IN C.E. 262.
4 HOURS
LECT-DISC E 10 MTUWTHFS 305 CEH
LAB 2-4 TU TH 309 CEH

C E 264 REINFORCED CONCRETE DESIGN.
PREREQUISITE--T.A.M. 224, C.E. 214, CREDIT OR REGISTRATION IN C.E. 262.
3 HOURS
NOTE--THREE-TWO HOUR DEMONSTRATION LABORATORIES TO BE ARRANGED.
*SECTION F IS A SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 13 FOR MILITARY STUDENTS.
LECT-DISC E 9 MTUWTHFS 305 CEH
LECT-DISC *F ARR

C E 290 CONTRACTS AND SPECIFICATIONS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING OR ARCHITECTURE.
2 HOURS
SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 13 FOR MILITARY STUDENTS ONLY.
LECT-DISC E ARR

C E 297 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING.
1 TO 4 HOURS
CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C E 334 AIRPORT DESIGN.
PREREQUISITE--C.E. 220 AND SENIOR STANDING IN CIVIL ENGINEERING, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
LECT-DISC E 1 MTUWTHF 200 T L

C E 366 BEHAVIOR OF REINFORCED CONCRETE MEMBERS.
PREREQUISITE--UNDERGRADUATES-SENIOR STANDING AND C.E. 264, GRAD STUDENTS-B.S.DEGREE IN C.E. OR ARCHITECTURE WITH COURSES IN STRUCTURES AND REINFORCED CONCRETE DESIGN.
4 HOURS, OR 1 UNIT
LECT-DISC 2 MTUWTHF 200 T L

C E 380 FOUNDATION ENGINEERING.
PREREQUISITE--C E 210, SENIOR STANDING.
3 HOURS, OR 1 UNIT
LECT-DISC E 8 MTUWTHFS 320 CEH

C E 384 APPLIED SOIL MECHANICS.
PREREQUISITE--C.E. 383, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 TO 1 UNIT
LECT-DISC E 11 MTUWTHFS 200 T L

C E 391 NUMERICAL AND COMPUTER APPLICATIONS IN CIVIL ENGINEERING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN CIVIL OR ARCH. ENG. OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
LECT-DISC E 9 MTUWTHFS 322 CEH

COURSES FOR GRADUATES

C E 460 STRUCTURAL ANALYSIS.
PREREQUISITE--B.S. DEGREE IN ENG. AND UNDERGRADUATE COURSE IN THEORY OF SIMPLE STRUCTURES.
1 UNIT
LECT-DISC E 1 MTUWTHF 305 CEH GAYLORD

C E 461 STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--B.S. IN C.E., AND C.E. 361, OR C.E. 460, OR EQUIVALENT
1 UNIT
LECT-DISC E 11 MTUWTHF 320 CEH HALL

C E 465 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--B.S. IN ENGINEERING WITH COURSES IN STRUCTURES.
1 UNIT
LECT-DISC E 3 MTUWTHF 305 CEH GAYLORD

C E 468 ANALYSIS AND DESIGN OF PRESTRESSED CONCRETE STRUCTURES.
PREREQUISITE--B.S. IN CIVIL OR ARCHITECTURAL ENGINEERING WITH COURSES IN REINFORCED CONCRETE AND IN ANALYSIS OF INDETERMINE STRUCTURES.
1 UNIT
LECT-DISC E 10 MTUWTHF 320 CEH KHACHATURIAN

C E 471 NUMERICAL AND APPROXIMATE METHODS OF STRUCTURAL ANALYSIS.
1 TO 2 UNITS
LECT-DISC E 9 MTUWTHF 320 CEH ROBINSON

C E 475 BEHAVIOR OF STEEL STRUCTURES.
PREREQUISITE--GRADUATE STANDING IN C.E. OR T.A.M.
1 UNIT
LECT-DISC E 8 MTUWTHF 200 T L MUNSE

C E 484. FOUNDATION ENGINEERING.
PREREQUISITE--CREDIT OR REGISTRATION IN C.E. 384 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	2	MTUWTHF	320	CEH	PECK

C E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS
SECTION *S IS A SPECIAL SECTION FOR MILITARY STUDENTS ONLY.
* SANITARY ENGINEERING

CONF	*S	9	MTUWTHF	208	CEH	ENGELBRECHT
LAB		2-5	TU TH	211	CEH	
	0	ARR				

C E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
SECTION-M-IS FOR MASTERS DEGREE, SECTION-D-IS FOR PH.D. DEGREE.

CONF	M	ARR	STAFF
CONF	D	ARR	STAFF

COMMUNICATIONS

DEPARTMENT OFFICE 1203 W ILLINOIS, U

THE GRADUATE PROGRAM LEADING TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATIONS IS ADMINISTERED BY AN INTERDISCIPLINARY COMMITTEE APPOINTED BY THE DEAN OF THE GRADUATE COLLEGE. STUDENTS SEEKING ADMISSION TO THIS PROGRAM SHOULD CONSULT DALLAS SMYTHE, CHAIRMAN OF THE COMMITTEE.

OF THE COURSES OFFERED THIS SEMESTER, COMM. 499 IS IN THE GENERAL CATEGORY, COMM. 474 IS IN GROUP A, AND COMM. 300 IS IN GROUP B.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

COMM 300 INTRODUCTION TO LINGUISTICS.
SAME AS LINGUISTICS 300. PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS, OR 1/2 TO 1 UNIT
*ONE HOUR TO BE ARRANGED

LECT-DISC	*9	MTUWTHF	108	L H	LEES

COURSES FOR GRADUATES

COMM 474 GOVERNMENT AND MASS COMMUNICATIONS.
SAME AS JOURN. 474.
1 UNIT

LECT-DISC	10-12	TU TH	123	G H	JENSEN

COMM 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS AND THESIS SUPERVISOR.
STUDENTS MAY RE-REGISTER FOR A TOTAL OF 8 UNITS.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

DAIRY SCIENCE

DEPARTMENT OFFICE 315 A S L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

D S 300 SPECIAL PROBLEMS.
SUPERVISED RESEARCH ON ANY PHASE OF DAIRY SCIENCE, INCLUDING BACTERIOLOGY AND MICROBIOLOGY, BIOCHEMISTRY, FEEDING AND NUTRITION, GENETICS, AND PHYSIOLOGY.
PREREQUISITE--SENIOR STANDING, APPROVAL OF HEAD OF DEPARTMENT.
3 TO 5 HOURS, OR 1/2 TO 1 UNIT
ARR SALISBURY AND STAFF

D S 330 REPRODUCTION AND ARTIFICIAL INSEMINATION OF FARM ANIMALS.
SAME AS AN. SCI. 330. PREREQUISITE--ZOOL. 104 AND EITHER D S 100 OR AN. SCI. 100.
3 HOURS, OR 3/4 UNIT, SUMMER--1/2 UNIT FOR 4 WEEKS.
FIRST FOUR WEEKS--JUNE 19 TO JULY 14.

LAB-DISC	10-12	MTU THF	414	A S L	VANDEMARK
	8-12	W	414	A S L	

COURSES FOR GRADUATES

D S 493 SPECIAL PROBLEMS.
INDIVIDUAL INVESTIGATIONS IN ANY PHASE OF DAIRY SCIENCE.
1/2 TO 2 UNITS
ARR SALISBURY AND STAFF

D S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR SALISBURY AND STAFF

DAIRY TECHNOLOGY

SEE FOOD TECHNOLOGY

DIVISION OF GENERAL STUDIES L A S

DEPARTMENT OFFICE 221 A H

COURSES FOR UNDERGRADUATES

D G S 131 BIOLOGICAL SCIENCE.
THIS COURSE IN COMBINATION WITH D G S 132 MEETS THE GENERAL EDUCATION REQUIREMENT IN BIOLOGICAL SCIENCES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		11	MTUWTH	247	N H B
LAB-DISC	1	1-3	MTUWTH	432	N H B
LAB-DISC	2	2-4	MTUWTH	432	N H B

D G S 141 PHYSICAL SCIENCE.
THIS COURSE IN COMBINATION WITH D G S 142 MEETS THE GENERAL EDUCATION REQUIREMENT IN PHYSICAL SCIENCES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		1	MTUWTHF	141	A H	
DISC	B	9	MTUWTHF	141	A H	GAIDES
DISC	D	11	MTUWTHF	141	A H	

ECONOMICS

DEPARTMENT OFFICE 226 D K H

SEE ALSO ACCOUNTANCY, AGRICULTURAL ECONOMICS, BUSINESS EDUCATION, BUSINESS LAW, FINANCE, MANAGEMENT, AND MARKETING

MAJOR--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108 OR 102 AND 103, AND ECON. 300 AND 301. LIBERAL ARTS MAJORS IN ECONOMICS ARE STRONGLY ADVISED TO ELECT ECON. 171 AND ACCY. 201. ECON. 171 IS ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR, BUT ACCY. 201 IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, EDUCATION, FINANCE, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY. AN ECONOMICS MAJOR WHO CHOOSES FINANCE AS A MINOR MUST INCLUDE TWELVE HOURS IN A SECOND MINOR. THE CURRICULUM IN LATIN-AMERICAN OR RUSSIAN AREA STUDIES IS ACCEPTED AS A MINOR.

NOTE--ECON. 102 AND 103 ARE REQUIRED FOR ALL COMMERCE STUDENTS, AND THESE OR 108 ARE REQUIRED FOR ALL LIBERAL ARTS MAJORS IN ECONOMICS. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN ECONOMICS SHOULD TAKE THESE COURSES IN THEIR SOPHOMORE YEAR.

COURSES FOR UNDERGRADUATES

ECON 102 PRINCIPLES OF ECONOMICS I.
PREREQUISITE--ONE YEAR OF UNIVERSITY WORK, OR SECOND SEMESTER FRESHMAN STANDING WITH DESIGNATION AS HONOR STUDENT OR JAMES SCHOLAR.
3 HOURS

LECT-DISC	B	9	MTUWTHFS	223	D K H	MURPHY

ECON 103 PRINCIPLES OF ECONOMICS, II.
PREREQUISITE--ECON. 102.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	223	D K H	BORNHOFEN

ECON 108 ELEMENTS OF ECONOMICS.
EXCLUSIVELY FOR NON-COMMERCE STUDENTS. THIS COURSE WITH ECON. 210 OR ECON. 218 SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
PREREQUISITE--SECOND SEMESTER FRESHMEN. NOT OPEN TO STUDENTS WHO HAVE HAD ECON. 102 AND 103
3 HOURS

LECT-DISC	A	8	MTUWTHF	125	D K H	COOPER
		3	M	125	D K H	
	B	9	MTUWTHF	125	D K H	STEVENSON
		3	W	125	D K H	

ECON 170 ELEMENTS OF STATISTICS.
NOT OPEN FOR CREDIT IN ADDITION TO ECON. 171, MATH. 161, OR PSYCH. 135. PREREQUISITE--ECON. 102 OR 108, SOPHOMORE STANDING.
3 HOURS

LECT-DISC	D	11	MTUWTHF	111	D K H	YANCEY
		3	W	111	D K H	

COURSES FOR ADVANCED UNDERGRADUATES

ECON 210 COMPARATIVE ECONOMIC SYSTEMS.
THIS COURSE WITH ECON. 108 SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	B	9	MTUWTHF	111	D K H	SCHICK
		3	TU	111	D K H	
	C	10	MTUWTHF	111	D K H	DAVIS
		3	W	19	D K H	

ECON 214 GOVERNMENT FINANCE AND TAXATION.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	A	8	MTUWTHF	111	D K H	SCHICK
		3	TH	222	D K H	

ECON 240 LABOR PROBLEMS.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	11	MTUWTHF	125	D K H	MCNATT
		3	M	111	D K H	

ECON 290 HONORS COURSE.
SENIOR CANDIDATES FOR GRADUATION WITH HONORS OR HIGH HONORS SHOULD ELECT ONE OR THE OTHER OF THE FOLLOWING OPTIONS--OPTION A, AN ACCEPTABLE THESIS IN ECONOMICS, OPTION B, A COMPREHENSIVE EXAMINATION SIX HOURS IN LENGTH, COVERING A REVIEW OF VARIOUS ASPECTS OF ECONOMICS. PREREQUISITE--A MAJOR IN ECONOMICS, AT LEAST 15 HOURS OF ADVANCED COURSES.
2 TO 4 HOURS

ARR MCMAHON

ECON 292 INDEPENDENT STUDY.
SENIORS REGISTERED IN THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION MAY, WITH THE CONSENT OF THE CHAIRMAN OF THE DEPARTMENT, DO INDEPENDENT STUDY FOR A TOTAL OF NOT MORE THAN TEN SEMESTER HOURS IN THIS DEPARTMENT OR SIXTEEN SEMESTER HOURS IF DIVIDED BETWEEN THIS AND ANY OTHER DEPARTMENT.
PREREQUISITE--CONSENT OF CHAIRMAN OF DEPARTMENT.
3 TO 5 HOURS

ARR MCMAHON

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ECON 300 INTERMEDIATE ECONOMIC THEORY AND ANALYSIS.
PREREQUISITE--ECON. 103, OR 109, OR A GRADE OF B OR BETTER IN ECON. 108.
3 HOURS, OR 1/2 UNIT

LECT-DISC	D	11	MTUWTHF	222	D K H	MCMAHON
		3	TU	222	D K H	

ECON 372 OPERATIONS RESEARCH.
PREREQUISITE--ECON. 170 AND MGMT. 101, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	B	9	MTUWTHF	222	D K H	SPRENKLE
		3	M	222	D K H	

COURSES FOR GRADUATES

ECON 400 GENERAL ECONOMIC THEORY.
PREREQUISITE--ECON. 102 AND 103, OR 108.
1 UNIT

LECT		8-10	TU F	119	D K H	MCMAHON

ECON 414 PUBLIC FINANCE.
PREREQUISITE--SIX HOURS OF ECONOMICS.
1 UNIT

LECT-DISC		10-12	TU TH	119	D K H	ALLEN

ECON 440 LABOR ECONOMICS.
SAME AS L.I.R. 440. PREREQUISITE--A MINIMUM OF SIX HOURS IN ECONOMICS.
1 UNIT

LECT-DISC		8-10	M TH	119	D K H	MCNATT

ECON 442 COLLECTIVE BARGAINING.
SAME AS L I R 442. PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

		10-12	TU F	ILIR CONF ROOM		STAFF

ECON 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT
ARR

ECON 499 THESIS RESEARCH.
REQUIRED OF ALL STUDENTS WRITING MASTERS AND DOCTORS THESES IN ECONOMICS.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

		8-10	W	119	D K H	MCNATT

EDUCATION

DEPARTMENT OFFICE 105 G H

COURSES FOR ADVANCED UNDERGRADUATES

ED 201 FOUNDATIONS OF AMERICAN EDUCATION.
PREREQUISITE--ED. 101, PSYCH. 100.
2 HOURS

LECT-DISC	B	9	TUWTHF	238	L H	METCALF
LECT-DISC	D	11	TUWTHF	311	G H	PALMER

ED 211 EDUCATIONAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100.
3 HOURS

LECT-DISC		8	TUWTHF	142	L H	SOARES
		1-3	TU	142	L H	

ED 230 PRINCIPLES OF ELEMENTARY EDUCATION.
PREREQUISITE--PSYCH. 100, ED. 101.
2 HOURS

LECT-DISC		10	TUWTHF	329	G H	SALZER

ED 233 CLASSROOM PROGRAMS IN CHILDHOOD EDUCATION.
PREREQUISITE--JUNIOR STANDING.
2 HOURS

LECT-DISC		8	TUWTHF	221	G H	SALZER

ED 235 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
PREREQUISITE--ED. 101. JUNIOR STANDING.
3 HOURS.

LECT-DISC		9	TUWTHF	219	G H	R EVANS
LAB		ARR				

ED 236 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--PSYCH. 100. ED. 101.
3 HOURS

LECT		9	TUWTHF	127	M H
LAB		2-4	TU TH	43	G H

ED 237 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--ED. 236.
3 HOURS

LECT		11	TUWTHF	9	G H
LAB		2-4	TU TH	307	G H

ED 240 PRINCIPLES OF SECONDARY EDUCATION.
PREREQUISITE--ED. 101. PSYCH. 100.
2 HOURS

LECT-DISC		9	TUWTHF	223	E B	PALMER

ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS
ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ED 301 PHILOSOPHY OF EDUCATION.
2 HOURS. OR 1/2 UNIT
*MEETS FIRST 4 WEEKS ONLY.

LECT-DISC	A	8	TUWTHF	319	G H	MCMURRAY
LECT-DISC	R	9	TUWTHF	113	G H	BUCKERIDGE
LECT-DISC	*C1	10-12	TUWTHF	215	G H	STANLEY
LECT-DISC	C2	10	TUWTHF	217	G H	MCMURRAY
LECT-DISC	D	11	TUWTHF	217	G H	BUCKERIDGE

ED 302 HISTORY OF AMERICAN EDUCATION.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	111	G H	VAN CLEVE
LECT-DISC	B	9	TUWTHF	217	G H	
LECT-DISC	C	10	TUWTHF	111	G H	VAN CLEVE
LECT-DISC	D	11	TUWTHF	219	G H	

ED 303 COMPARATIVE EDUCATION.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	207	G H	KAULFERS
LECT-DISC	B	9	TUWTHF	207	G H	CLIFT
LECT-DISC	C	10	TUWTHF	207	G H	KAULFERS
LECT-DISC	D	11	TUWTHF	207	G H	CLIFT

ED 304 SOCIAL FOUNDATIONS OF EDUCATION.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A1	8	TUWTHF	317	G H	BOWLER
LECT-DISC	A2	8	TUWTHF	321	G H	LIEBERMAN
LECT-DISC	B	9	TUWTHF	317	G H	BOWLER
LECT-DISC	C	10	TUWTHF	213	G H	LIEBERMAN
LECT-DISC	D	11	TUWTHF	327	G H	SMITH

ED 311 PSYCHOLOGY OF LEARNING FOR TEACHERS.
PREREQUISITE--ED. 211. PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS. OR 1/2 UNIT
*SECTION A1 MEETS FIRST 4 WEEKS ONLY.

LECT-DISC	*A1	8-10	TUWTHF	213	G H	JONES
LECT-DISC	A2	8	TUWTHF	100	G H	
LECT-DISC	B1	9	TUWTHF	319	G H	KNAPP
LECT-DISC	B2	9	TUWTHF	331	G H	RENZAGLIA
LECT-DISC	C	10	TUWTHF	221	G H	KNAPP
LECT-DISC	D	11	TUWTHF	213	G H	BLAIR

ED 312 MENTAL HYGIENE AND THE SCHOOL.
PREREQUISITE--ED. 211. PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A1	8	TUWTHF	311	G	H	PETERSON
LECT-DISC	B	9	TUWTHF	223	G	H	MOWRER
LECT-DISC	C1	10	TUWTHF	223	G	H	KACZKOWSKI
LECT-DISC	C2	10	TUWTHF	3	G	H	
LECT-DISC	D1	11	TUWTHF	331	G	H	A. JACKSON
LECT-DISC	D2	11	TUWTHF	319	G	H	GRONLUND

ED 316 THE GIFTED CHILD IN SCHOOL AND SOCIETY.
PREREQUISITE--ED. 211 OR 236.
3 HOURS. OR 1/2 TO 1 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC		8	W F	107	L	H	
		8-10	TU TH	107	L	H	M KARNES

ED 318 WORKSHOP AND LABORATORY IN EDUCATION OF EXCEPTIONAL CHILDREN.
PREREQUISITE--ED. 322.
4 TO 8 HOURS. OR 1 TO 2 UNITS
*SECTION A IS FOR EDUCABLE MENTALLY HANDICAPPED AND WILL BE OFFERED FOR 8 WEEKS. ADDITIONAL HOURS TO BE ARRANGED.
*SECTION C IS FOR GIFTED AND WILL BE OFFERED FOR 8 WEEKS. ADDITIONAL HOURS TO BE ARRANGED.
*SECTION D IS FOR DEAF AND WILL BE OFFERED FOR 8 WEEKS. ADDITIONAL HOURS TO BE ARRANGED.

LECT-DISC	*A	9-3	TUWTHF	1003 W NEVADA	HAHN
LECT-DISC	*C	9-3	TUWTHF	1003 W NEVADA	SHAFFER
LECT-DISC	*D	9-3	TUWTHF	1003 W NEVADA	ABBOTT

ED 322 PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED.
PREREQUISITE--ED. 231. SENIOR STANDING.
3 HOURS. OR 1/2 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC	8-10	TUWTHF	1001 W NEVADA	JORDAN

ED 323 PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED.
CONTINUATION OF ED. 322. WITH EMPHASIS ON CURRICULUM.
PREREQUISITE--ED. 322.
3 HOURS. OR 1/2 UNIT
MEETS SECOND FOUR WEEKS

LECT-DISC	8-10	TUWTHF	THORNBURN SCHL	JORDAN

ED 324 MENTAL AND EDUCATIONAL MEASUREMENT OF EXCEPTIONAL CHILDREN.
PREREQUISITE--ED. 117 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 TO 1 UNIT

LECT-DISC	3-5	TUWTHF	1001 W NEVADA	NEWLAND

ED 326 INTRODUCTION TO VOCATIONAL REHABILITATION COUNSELING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT

LECT-DISC	ARR		PATTERSON

ED 335 SCIENCE IN THE ELEMENTARY SCHOOL.
PREREQUISITE--ED. 101 AND 201. OR EQUIVALENT COURSES. TWO YEARS OF COLLEGE SCIENCE.
3 HOURS. OR 1/2 UNIT
*LECTURE REQUIRES FOUR ADDITIONAL LAB HOURS TO BE ARRANGED.

LECT-DISC	*10	TUWTHF	2	E	E	C	R. W. BURNETT
LAB	ARR						

ED 336 PRIMARY READING.
PREREQUISITE--ED. 101. 201. AND 230.
3 HOURS. OR 1/2 UNIT
*SECTION C1 MEETS FIRST 4 WEEKS.

LECT-DISC	*C1	10-12	TUWTHF	307	G	H	MOORE
LECT-DISC	D	11	TUWTHF	4	G	H	I. KELLY

ED 337 ART EDUCATION IN THE ELEMENTARY SCHOOL.
PREREQUISITE--ED. 101. 201. AND 230.
3 HOURS. OR 1/2 UNIT

LECT-DISC	B	9	TUWTHF	106	F	A	B BREEN
LECT-DISC	D	11	TUWTHF	106	F	A	B LANSING

ED 343 INDIVIDUAL INTELLIGENCE TESTING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY AND EITHER ED. 324, OR ED. 392, OR PSYCH. 290, OR EQUIVALENT.
3 HOURS, OR 1 UNIT

LECT	1-3	TUWTHF	134	E P G B	NEWLAND
LAB	ARR				

ED 383 DEVELOPMENT, ORGANIZATION, AND PRINCIPLES OF INDUSTRIAL EDUCATION.
SAME AS IND. ED. 383.
3 HOURS, OR 1/2 TO 1 UNIT

LECT	1	TUWTHF	321	G H	LUX
LAB	ARR				

ED 384 THE GENERAL SHOP PROGRAM.
SAME AS IND. ED. 384. PREREQUISITE--SIXTEEN HOURS IN INDUSTRIAL EDUCATION.
4 HOURS, OR 1 UNIT

LECT-DISC	2-5	TUWTHF	5	WOODSHOP	ZIEL

ED 390 ELEMENTS OF EDUCATIONAL STATISTICS.
3 HOURS, OR 1 UNIT

LECT-DISC	9-11	TUWTHF	205	G H	KAPPAUF

ED 391 CONSTRUCTION AND USE OF TESTS IN TEACHING.
PREREQUISITE--ED. 211.
2 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	10	TUWTHF	304	G H	GRONLUND

ED 392 INTRODUCTION TO THE PRINCIPLES OF MEASUREMENT.
PREREQUISITE--ED. 211.
2 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC A	10	TUWTHF	43	G H	HASTINGS
LECT-DISC C	11	TUWTHF	205	G H	MCGEE

COURSES FOR GRADUATES

ED 410 SEMINAR IN THEORIES OF EDUCATIONAL AND SOCIAL CHANGE.
ONLY OPEN TO CANDIDATES FOR THE ED. D. OR PH. D. IN EDUCATION.
1 UNIT

LECT-DISC	1-3	TU TH	304	G H	SMITH, STANLEY

ED 411 PSYCHOLOGY OF ADOLESCENCE FOR TEACHERS.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	10	TUWTHF	219	G H	JONES

ED 412 ADVANCED CHILD DEVELOPMENT FOR STUDENTS OF EDUCATION.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	8	TUWTHF	219	G H	COSTIN

ED 413 SOCIAL PSYCHOLOGY AND THE PROBLEMS OF EDUCATION.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	8	TUWTHF	215	G H	R. SIMPSON

ED 414 THE PSYCHOLOGY OF COLLEGE TEACHING.
PREREQUISITE--A COURSE IN PSYCHOLOGY, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	9	TUWTHF	307	G H	R. SIMPSON

ED 415 PSYCHOLOGICAL THEORIES APPLIED TO EDUCATION.
PREREQUISITE--ED. 311 AND 312, ED. 411 OR 412, CANDIDACY FOR ED.D OR PH.D IN EDUCATION.
1 UNIT

LECT-DISC	1-3	TU TH	305	G H	BLAIR

ED 417 PSYCHO-EDUCATIONAL PROBLEMS OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SIXTEEN HOURS OF PSYCHOLOGY AND/OR EDUCATION, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		10	TUWTHF	1003	W NEVADA	D PHILLIPS

ED 418 PROBLEMS IN COMMUNICATION FOR THE DEAF.
PREREQUISITE--ED. 319 AND 320 OR EQUIVALENT.
1 UNIT

LECT-DISC		2	TUWTHF	1001	W NEVADA	D PHILLIPS

ED 422 BASIC PRINCIPLES OF COUNSELING.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	A	8	TUWTHF	205	G H	SLATER
LECT-DISC	B	9	TUWTHF	43	G H	KACZKOWSKI
LECT-DISC	C	10	TUWTHF	107	L H	RENZAGLIA

ED 423 THE USE OF TESTS IN GUIDANCE.
PREREQUISITE--ED. 392.
1 UNIT

LECT-DISC		11	TUWTHF	317	G H	STAFFORD

ED 424 SUPERVISED PRACTICE IN COUNSELING.
PREREQUISITE--MASTERS DEGREE IN GUIDANCE AND CONSENT OF FACULTY COMMITTEE.
2 UNITS

	A	ARR	116	EPGB	SHOEMAKER
	B	ARR	116	EPGB	BROPHY

ED 425 PRINCIPLES OF GUIDANCE.
STUDENTS WHO HAVE TAKEN ED. 325 ARE NOT ALLOWED CREDIT FOR ED. 425.
1 UNIT

LECT-DISC	B	9	TUWTHF	321	G H	PATTERSON
LECT-DISC	C	10	TUWTHF	319	G H	STAFFORD
LECT-DISC	D	11	TUWTHF	305	G H	OHLSEN

ED 426 DIAGNOSTIC AND REMEDIAL PROGRAMS OF THE SCHOOL.
1 UNIT

	B	9	TUWTHF	215	G H	CULLITON
	C	10	TUWTHF	311	G H	W. EVANS

ED 427 PRINCIPLES AND TECHNIQUES OF GROUP GUIDANCE.
PREREQUISITE--ED. 311, 312, 422, 423, AND EITHER 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		8-10	TUWTHF	116	E P G B	OHLSEN

ED 428 THE ANALYSIS AND USE OF OCCUPATIONAL INFORMATION IN GUIDANCE PROGRAMS.
PREREQUISITE--ED. 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		10	TUWTHF	315	G H	A. JACKSON

ED 429 FIELD INSTRUCTION IN COUNSELING.
PREREQUISITE--ED. 422 AND 424--WITH THE INSTRUCTORS CONSENT.
REGISTRATION IN ED. 424 MAY BE CONCURRENT.
1 TO 2 UNITS

		ARR				PATTERSON

ED 430 ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION.
PREREQUISITE--ED. 431 AND 439.
1 UNIT

LECT-DISC		8	TUWTHF	329	G H	HERMAN

ED 431 ELEMENTARY SCHOOL CLASSROOM PROGRAMS.
1 UNIT

LECT-DISC	B	9	TUWTHF	311	G	H	I. KELLY
LECT-DISC	C	10	TUWTHF	317	G	H	
LECT-DISC	D	11	TUWTHF	321	G	H	SPAULDING

ED 433 CURRICULUM PROBLEMS AND TRENDS IN SPECIAL FIELDS OF ELEMENTARY EDUCATION.
PREREQUISITE--ED. 431. FOR THE SECTION IN READING AND THE LANGUAGE ARTS. ED. 336 OR A COURSE IN THE TEACHING OF READING OR LANGUAGE ARTS. OR THE CONSENT OF THE INSTRUCTOR. ED. 335 AND TWO YEARS OF COLLEGE SCIENCE OR THE CONSENT OF THE INSTRUCTOR IS REQUIRED FOR THE SECTION IN ELEMENTARY SCIENCE.
1 UNIT
*SECTION A IS FOR SCIENCE
*SECTION B IS FOR ARITHMETIC.
*SECTION C IS FOR SOCIAL STUDIES.
*SECTIONS B1 AND D ARE FOR LANGUAGE ARTS.

LECT-DISC	*A	8	TUWTHF	217	G	H	R W BURNETT
LECT-DISC	*B	9	TUWTHF	123	G	H	HERMAN
LECT-DISC	*B1	9	TUWTHF	221	G	H	W EVANS
LECT-DISC	*C	10	TUWTHF	327	G	H	MCGILL
LECT-DISC	*D	11	TUWTHF	113	G	H	CULLITON

ED 434 PROGRAMS IN EARLY CHILDHOOD EDUCATION.
PREREQUISITE--ED. 431.
1 UNIT

LECT-DISC	8	TUWTHF	43	G	H	

ED 437 METHODS OF CHILD STUDY.
PREREQUISITE--ED. 312 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	8	TUWTHF	113	G	H	

ED 438 SUPERVISION OF THE ELEMENTARY SCHOOL.
PREREQUISITE--ED. 431 AND 439.
1 UNIT

LECT-DISC	8	TUWTHF	331	G	H	MCGILL

ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT

LECT-DISC	A	8	TUWTHF	223	G	H	HAND
LECT-DISC	B	9	TUWTHF	329	G	H	SHORES
LECT-DISC	C	10	TUWTHF	331	G	H	DEBOER
LECT-DISC	D	11	TUWTHF	3	G	H	SHORES

ED 440 ADMINISTRATION AND SUPERVISION OF JUNIOR AND SENIOR HIGH SCHOOLS.
PREREQUISITE--ED. 460 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	8	TUWTHF	315	G	H	MCCLEARY
LECT-DISC	D	11	TUWTHF	329	G	H	HAND

ED 441 LINGUISTIC AND LOGICAL ANALYSIS OF TEACHING.
1 UNIT

LECT-DISC	10	TUWTHF	336	G	H	HENDERSON

ED 448 ADULT EDUCATION.
1/2 OR 1 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC	8-10	TUWTHF	304	G	H	E W ANDERSON

ED 449 INDEPENDENT STUDY.
NO MORE THAN TWO UNITS IN ED. 449 MAY BE OFFERED TOWARD AN ADVANCED DEGREE EXCEPT BY SPECIAL CONSENT OF THE DEAN.
1/2 TO 1 UNIT

CONF	ARR					GRADUATE STAFF

ED 450 EVALUATION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS.

LECT-DISC	8-11	TUWTHF	4	G	H	WALSH

ED 451 SUPERVISION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS
LECT-DISC 8-11 TUWTHF 9 G H MATHER

ED 453 PROBLEMS IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS FIRST FOUR WEEKS.
LECT-DISC 8-11 TUWTHF 9 G H MATHER

ED 455 THEORIES OF ART EDUCATION.
PREREQUISITE--ED. 337 OR 456, OR CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 9 TUWTHF 133 F A B LANSING

ED 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.
1 UNIT
*SECTION A1 IS FOR ENGLISH.
*SECTION A2 IS FOR MATHEMATICS.
*SECTION A3 IS FOR SOCIAL STUDIES.
*SECTION B IS FOR BUSINESS EDUCATION.
*SECTION E IS FOR HOME ECONOMICS AND MEETS FIRST FOUR WEEKS.
LECT-DISC *A1 8 TUWTHF 305 G H DEBOER
LECT-DISC *A2 8 TUWTHF 307 G H HENDERSON
LECT-DISC *A3 8 TUWTHF 123 G H METCALF
LECT-DISC *B 10-12 TU TH 10 D K H CONDON
LECT-DISC *E 8-11 TUWTHF 128 M H WALSH

ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.

RESEARCH DESIGN IN AGRICULTURAL EDUCATION
1/2 UNIT LECT-DISC *A 8-10 TUWTHF 327 G H PHIPPS
*SECTION A IS FOR AGRICULTURAL EDUCATION AND MEETS THE FIRST FOUR WEEKS. STUDY OF CURRENT RESEARCH IN AGRICULTURAL EDUCATION, THE RESEARCH NEEDED, THE DESIGNING OF RESEARCH, SOURCES OF INVALIDITY, AND THE EVALUATION OF RESEARCH DESIGN.

AGRICULTURAL EDUCATION IN AREA SCHOOLS.
1/2 UNIT LECT-DISC *B 10-12 TUWTHF 18 G H PHIPPS
*SECTION B IS FOR AGRICULTURAL EDUCATION AND MEETS THE FIRST FOUR WEEKS. STUDY OF AREA SCHOOLS AND AGRICULTURAL EDUCATION IN AREA SCHOOLS, WITH SPECIAL EMPHASIS ON PURPOSES, PROSPECTIVE STUDENTS, CURRICULA, ADMINISTRATION, AND RESEARCH NEEDED.

AGRICULTURAL EDUCATION IN JUNIOR AND SENIOR HIGH SCHOOLS
1/2 UNIT LECT-DISC *C 8-10 TUWTHF 18 G H KREBS
*SECTION C IS FOR AGRICULTURAL EDUCATION AND MEETS THE FIRST FOUR WEEKS. STUDY OF BASIC CONCEPTS UNDERLYING SPECIALIZED, GENERAL AND NONVOCATIONAL COURSES IN AGRICULTURE.

OFFICE AUTOMATION
1 UNIT LECT-DISC *D 10-12 TUWTHF 8 D K H MELSON
ADDITIONAL LAB HOURS ARRANGED.
*SECTION D IS FOR OFFICE AUTOMATION AND MEETS THE SECOND FOUR WEEKS. WILL STUDY THE BASIC CONCEPTS OF OFFICE AUTOMATION, IDENTIFY ITS NATURE, FUNCTIONS, PROBLEMS, AND TRENDS, CONSIDER ITS RELATIONSHIP TO OTHER SUBJECT MATTER IN THE FIELD OF OFFICE PROCEDURES, AND INVESTIGATE POINTS OF VIEW IN CURRICULUM DEVELOPMENT, INCLUDING GRADE LEVEL AND CONTENT OF INSTRUCTION. KEY PUNCH AND PUNCH TAPE EQUIPMENT WILL BE AVAILABLE FOR STUDY AND PRACTICE.

BASIC BUSINESS AND ECONOMIC EDUCATION
1 UNIT LECT-DISC *E ARR 512 E CHALMERS CRANK
*SECTION E IS FOR BASIC BUSINESS AND ECONOMIC EDUCATION AND MEETS THE SECOND FOUR WEEKS. DEVOTED TO A STUDY OF THE CONTENT AND INSTRUCTIONAL PROCEDURES IN BASIC BUSINESS AND ECONOMIC EDUCATION. SPECIAL ATTENTION GIVEN TO CONCEPTS IN ECONOMIC EDUCATION AS DEFINED IN RECENT RESEARCH, TO THE INTEGRATION OF PERSONAL ECONOMICS WITH BROAD SOCIAL ECONOMIC CONCEPTS, AND THE DEVELOPMENT OF INSTRUCTIONAL MATERIALS.

FAMILY FINANCE
1 UNIT LECT-DISC *F ARR 512 E CHALMERS CRANK
*SECTION F IS FOR FAMILY FINANCE AND MEETS FIRST FOUR WEEKS. DEVELOPMENT OF FAMILY FINANCE INSTRUCTIONAL MATERIALS IN THE AREA OF SPECIAL INTEREST. REGISTRATION RESTRICTED TO THOSE WHO HAVE BEEN PRE-ENROLLED.

READING
1 UNIT LECT-DISC *G 9-12 TUWTHF 115 E E C MOORE
130-3 TUWTHF 115 E E C
*SECTION G IS FOR READING AND MEETS SECOND FOUR WEEKS. DESIGNED TO GIVE DIRECT HELP ON THE PROBLEMS WHICH LOCAL SCHOOLS FACE IN ORGANIZING READING PROGRAMS AND IN TEACHING READING. WILL SERVE TO BRING TEACHERS AND ADMINISTRATORS UP TO DATE ON RECENT TRENDS AND DEVELOPMENTS IN METHODS AND MATERIALS, RESEARCH AND CURRENT EXPERIMENTATION IN TEACHING READING.

ARITHMETIC
1 UNIT LECT-DISC *H 9-12 TUWTHF 115 E E C C. PHILLIPS
130-3 TUWTHF 115 E E C
*SECTION H IS FOR ARITHMETIC AND MEETS FIRST FOUR WEEKS. IMPROVEMENT OF THE TEACHING OF ARITHMETIC BY OFFERING TWO KINDS OF HELP--BASIC UNDERSTANDING OF OUR NUMBER SYSTEM AND MODERN METHODS OF TEACHING ARITHMETIC.

DRAFTING AND ENGINEERING GRAPHICS
1 UNIT LECT-DISC *I 8-11 TUWTHF 302 T B HALL
*SECTION I IS FOR DRAFTING AND ENGINEERING GRAPHICS AND MEETS SECOND FOUR WEEKS. A THEORY AND LABORATORY COURSE INTENDED TO SERVE THE INDUSTRIAL EDUCATION TEACHER INTERESTED IN DEVELOPING AN UNDERSTANDING OF CURRENT DEVELOPMENTS IN DRAFTING AND ENGINEERING GRAPHICS AND SKILL IN USING CURRENT PRACTICES TO IMPROVE HIS INDUSTRIAL EDUCATION INSTRUCTION.

DESIGN
1 UNIT LECT-DISC *J 10-12 TUWTHF 5 WOODSHOP TINKHAM
*SECTION J IS FOR DESIGN AND MEETS FIRST FOUR WEEKS. A THEORY AND LABORATORY COURSE INTENDED TO SERVE THE INDUSTRIAL EDUCATION TEACHER INTERESTED IN DEVELOPING--A--AN UNDERSTANDING OF CONTEMPORARY DESIGN,--B--SKILL IN USING BETTER DESIGN TO IMPROVE HIS INDUSTRIAL EDUCATION INSTRUCTION.

SUPERVISION OF STUDENT TEACHING
1 UNIT LECT-DISC *K 9-1130 TUWTHF ARR MANOLAKES
130-3 TUWTHF ARR
*SECTION K IS FOR ELEMENTARY SCHOOL COOPERATING TEACHERS AND MEETS JUNE 26 THROUGH JULY 20. THIS WORKSHOP IS ESPECIALLY DESIGNED FOR CLASSROOM TEACHERS WHO WORK OR ARE PLANNING TO WORK WITH STUDENT TEACHERS. IT WILL FOCUS ON IMPROVED SUPERVISORY PRACTICES AND ENRICHED CLASSROOM PROGRAMS THROUGH ATTENTION TO NEWER DEVELOPMENTS IN CURRICULUM, METHODOLOGY AND MATERIALS AS A WAY OF IMPROVING THE STUDENT TEACHING EXPERIENCE.

PHYSICS
1 UNIT LECT-DISC *L 8-12 TUWTHF 301 U H S GOULD, SNYDER
*SECTION L MEETS DURING THE EIGHT-WEEK SESSION AND IS PRIMARILY DESIGNED FOR TEACHERS OF PHYSICS. DEMONSTRATION CLASSES OF HIGH SCHOOL CHEMISTRY STUDENTS WILL SERVE TO ILLUSTRATE TECHNIQUES AND PATTERNS DISCUSSED IN WORKSHOP. CRITICAL ANALYSIS OF PSSC PHYSICS, CBA CHEMISTRY, AND OTHER NEW CURRICULUM DEVELOPMENTS IN THE SCIENCES ARE INCLUDED.

CHEMISTRY
1 UNIT LECT-DISC *M 8-12 TUWTHF 301 U H S GOULD, SNYDER
*SECTION M MEETS DURING THE EIGHT-WEEK SESSION AND IS PRIMARILY DESIGNED FOR TEACHERS OF CHEMISTRY. DEMONSTRATION CLASSES OF HIGH SCHOOL PHYSICS AND CHEMISTRY STUDENTS WILL SERVE TO ILLUSTRATE TECHNIQUES AND PATTERNS DISCUSSED IN WORKSHOP. CRITICAL ANALYSIS OF PSSC PHYSICS, CBA CHEMISTRY, AND OTHER NEW CURRICULUM DEVELOPMENTS IN THE SCIENCES ARE INCLUDED.

CONSUMER PROBLEMS IN HOME ECONOMICS
1 UNIT LECT-DISC *N 8-11 TUWTHF 4 G H SAVAGE
*SECTION N IS FOR CONSUMER PROBLEMS IN HOME ECONOMICS AND MEETS THE FIRST FOUR WEEKS. A MAJOR EMPHASIS IN TODAYS CURRICULUM, THIS ASPECT IS STUDIED IN RELATION TO ALL AREAS OF HOME ECONOMICS. RECENT LITERATURE GREATLY FACILITATES THESE APPLICATIONS, WAYS TO MOTIVATE AND ACHIEVE EXCELLENT RESULTS ARE DEVELOPED THROUGH INDIVIDUAL AND GROUP PROJECTS.

GUIDANCE INSTITUTE
2 UNITS LECT-DISC *O ARR ARBOR SUITES PROFF AND STAFF
*LIMITED TO PRE-SELECTED GUIDANCE INSTITUTE PARTICIPANTS ONLY.

NATIONAL SCIENCE FOUNDATION MATHEMATICS PROGRAM
1-1/2 UTS LECT-DISC *P ARR BEBERMAN, STAFF
*SECTION P IS RESTRICTED TO NATIONAL SCIENCE FOUNDATION STIPEND HOLDERS ONLY WHO HAVE BEEN PRE-ENROLLED FOR THE MATHEMATICS PROGRAM. MEETS JULY 2 THROUGH AUGUST 10.

ED 460 PUBLIC CONTROL AND ADMINISTRATION OF EDUCATION.
NOT OPEN TO EXPERIENCED ADMINISTRATORS OR TO ANY STUDENTS WHO HAVE TAKEN ANY OF THE FOLLOWING COURSES--OR EQUIVALENTS--EDUCATION 430, 440, 461, 462, 464, 465, 466.
1 UNIT

LECT-DISC	B	9	TUWTHF	111	G	H	MILLER
LECT-DISC	C	10	TUWTHF	305	G	H	MILLER

ED 461 ADMINISTRATION OF EDUCATIONAL PROGRAMS AND PERSONNEL.
PREREQUISITE--ED. 460, ED. 430 OR 440.
1 UNIT

LECT-DISC	11-3	TU TH	336	G	H	BARNES MCCLEARY

ED 462 FINANCIAL AND OPERATING STRUCTURES OF PUBLIC EDUCATION.
PREREQUISITE--ED. 460, 430, OR 440 AND 461.
1 UNIT

LECT-DISC	8-10	TUWTHF	336	G	H	CASTALDI SUMPTION

ED 466 PUBLIC SCHOOL FINANCE.
PREREQUISITE--ED. 460, 462 AND 430, OR 440.
1 UNIT

LECT-DISC	9	TUWTHF	305	G	H	MCLURE

ED 468 PUBLIC RELATIONS OF THE SCHOOLS.
1 UNIT

LECT-DISC	8	TUWTHF	3	G	H	BENNER

ED 469 LEGAL BASIS OF SCHOOL ADMINISTRATION.
1 UNIT

LECT-DISC	10	TUWTHF	325	G	H	BENNER

ED 470 PRINCIPLES AND RESOURCES FOR SCHOOL PLANT PLANNING.
PREREQUISITE--ED. 460.
1 UNIT

LECT-DISC	11	TUWTHF	304	G	H	CASTALDI

ED 471 POLICY AND POLICY MAKING FOR PUBLIC SCHOOL EDUCATION IN AGRICULTURE.
PREREQUISITE--AGR ED 276 AND 277. OPEN TO SCHOOL ADMINISTRATORS WITHOUT PREREQUISITES.
1/2 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC	1-3	TUWTHF	325	G	H	HAMLIN

ED 472 COURSE PLANNING AND TEACHING PROCEDURES IN VOCATIONAL AGRICULTURE.
PREREQUISITE--AG. ED. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC	8-10	TUWTHF	46	G	H	HEMP

ED 473 VOCATIONAL EDUCATION IN AGRICULTURE FOR ADULTS.
PREREQUISITE--AGR. ED. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC	10-12	TUWTHF	46	G	H	HEMP

ED 476 GUIDANCE IN AGRICULTURAL EDUCATION.
PREREQUISITE--AG. ED. 276, 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC	1-3	TUWTHF	331	G	H	KREBS

ED 481 HISTORY AND BASIC CONCEPTS OF VOCATIONAL EDUCATION.
1 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC	8-10	TUWTHF	325	G	H

ED 488 CURRICULUM PROBLEMS AND TRENDS IN INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN INDUSTRIAL EDUCATION.
1 UNIT
LECT-DISC 11 TUWTHF 325 G H LUX

ED 489 ADMINISTRATION AND SUPERVISION OF INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN INDUSTRIAL EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS
LECT-DISC 8-10 TUWTHF 325 G H

ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE BEEN ADMITTED TO CANDIDACY FOR THE DEGREES OF PH.D. OR ED.D. AND HAVE COMPLETED THE PRELIMINARY EXAMINATION.
1 TO 2 UNITS
ARR GRADUATE STAFF

ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS
ARR GRADUATE STAFF

ED 496 STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. 390.
1 UNIT
LECT-DISC 11 TUWTHF 221 G H PINGRY
LAB 1-3 TUW F 221 G H

ED 497 ADVANCED STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. 496.
1 UNIT
LECT-DISC 1 TUWTHF 307 G H RUNKEL
LAB 2-4 W 307 G H

ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
*SECTION A IS FOR A. M. OR M. S. DEGREE CANDIDATES. SECTION B IS FOR PH. D. CANDIDATES. SECTION C IS FOR EDD CANDIDATES.
*A ARR GRADUATE STAFF
*B ARR GRADUATE STAFF
*C ARR GRADUATE STAFF

ELECTRICAL ENGINEERING

DEPARTMENT OFFICE 158 E E B

COURSES FOR UNDERGRADUATES

E E 114 WIRING AND ILLUMINATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
ENGINEERING STUDENTS RECEIVE NO CREDIT.
3 HOURS
LECT-DISC A 8-10 TU TH S 57 E E B

E E 126 INTRODUCTION TO ELECTRICAL ENGINEERING THEORY.
PREREQUISITE--PHYCS. 107. CREDIT OR REGISTRATION IN MATH. 345.
4 HOURS
QUIZ A 10-12 MTUWTHF 59 E E B

COURSES FOR ADVANCED UNDERGRADUATES

E E 220 BASIC ELECTRICAL ENGINEERING.
PREREQUISITE--PHYSICS 106 AND 107, AND MATH 143.
3 HOURS

QUIZ	A	9	MTUWTHF	161	E E B
		1	TU	161	E E B

E E 229 ELECTRIC AND MAGNETIC FIELDS.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 345, PHYS. 107.
3 HOURS

QUIZ	A	10	MTUWTHF	162	E E B
		1	W	162	E E B
QUIZ	B	11	MTUWTHF	163	E E B
		1	TH	163	E E B

E E 234 ELECTRICAL MEASUREMENTS AND INSTRUMENTS.
PREREQUISITE--E E 220.
2 HOURS

QUIZ	A	10	MTUWTH	163	E E B

E E 235 ELECTRICAL MEASUREMENT LABORATORY.
TO ACCOMPANY E.E. 234. PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 234.
1 HOUR

LAB	A	2-5	M W	50J	E E B

E E 271 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

ARR

E E 288 ECONOMIC ASPECTS OF ENGINEERING.
SAME AS G.E. 288. PREREQUISITE--ECON. 108 AND JUNIOR STANDING.
3 HOURS

QUIZ	A	9	MTUWTHF	254	E E B
		1	TU	254	E E B
QUIZ	B	10	MTUWTHF	254	E E B
		1	W	254	E E B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

E E 320 INTRODUCTION TO CIRCUIT ANALYSIS.
STUDY OF THE FORMULATION AND SOLUTION OF NETWORK EQUATIONS FOR SINUSOIDAL AND GENERAL SIGNALS, NETWORK THEOREMS, THREE-PHASE SYSTEMS. PREREQUISITE--E.E. 126, PHYCS. 107, MATH. 345, CREDIT OR REGISTRATION IN E.E. 321.
4 HOURS, OR 0 TO 1 UNIT

QUIZ	A	8-10	MTUWTHF	163	E E B

E E 321 CIRCUIT LABORATORY.
TO ACCOMPANY E.E. 320. PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 229, 320.
1 HOUR, OR 0 TO 1/4 UNIT

LAB	A	2-5	TU TH	146	E E B
LAB	B	2-5	M W	146	E E B

E E 322 CIRCUIT ANALYSIS.
PREREQUISITE--E E 320 AND 321, MATH. 345, CREDIT OR REGISTRATION IN E E 323.
4 HOURS, OR 0 TO 1 UNIT

QUIZ	A	8-10	MTUWTHF	162	E E B

E E 323 CIRCUIT LABORATORY.
TO ACCOMPANY E. E. 322 AND 350. PREREQUISITE--E. E. 320 AND 321, CREDIT OR REGISTRATION IN E. E. 322 & 350.
1 HOUR, OR 0 TO 1/4 UNIT

LAB	A	2-5	M W	146	E E B

E E 330 MAGNETIC CIRCUITS AND TRANSFORMERS.
PREREQUISITE--F E 229, 320, 321, CREDIT OR REGISTRATION IN E E 331.
3 HOURS, OR 0 TO 3/4 UNIT

QUIZ	A	9	MTUWTHF	257	E E B
		1	TU	257	E E B

E E 331 MAGNETIC CIRCUITS AND TRANSFORMER LABORATORY.
TO ACCOMPANY E. E. 330. PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 330.
1 HOUR, OR 0 TO 1/4 UNIT

LECT	A	1	M TH	50M	E E B
LAB	A	2-5	M W	50M	E E B

E E 332 ELECTRICAL MACHINERY.
PREREQUISITE--F E 330 AND 331, CREDIT OR REGISTRATION IN E E 333.
3 HOURS, OR 0 TO 3/4 UNIT

QUIZ	A	8	MTUWTHF	59	E E B
		1	M	59	E E B

E E 333 ELECTRICAL MACHINERY LABORATORY.
TO ACCOMPANY E.E. 332. PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 332.
1 HOUR, OR 0 TO 1/4 UNIT

LAB	A	2-5	TU TH	50F	E E B

E E 340 ELECTRONICS.
PREREQUISITE--E.E. 320 AND 321.
3 HOURS, OR 0 TO 3/4 UNIT

QUIZ	A	10	MTUWTHF	261	E E B
		1	W	261	E E B

E E 341 ELECTRONICS LABORATORY
TO ACCOMPANY E.E. 340. PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 340.
1 HOUR, OR 0 TO 1/4 UNIT

LAB	A	2-5	TU TH	241	E E B

E E 342 ADVANCED ELECTRONICS.
PREREQUISITE--E.E. 322.
3 HOURS, OR 0 TO 3/4 UNIT

QUIZ	A	10	MTUWTHF	250	E E B
		1	W	250	E E B
QUIZ	B	11	MTUWTHF	250	E E B
		1	TH	250	E E B

E E 343 ELECTRONICS LABORATORY
TO ACCOMPANY E.E. 342. PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 342.
1 HOUR, OR 0 TO 1/4 UNIT

LAB	A	2-5	M W	245	E E B
LAB	B	2-5	TU TH	245	E E B

E E 350 TRANSMISSION LINES.
PREREQUISITE--E E 320, MATH. 345.
3 HOURS, OR 0 TO 3/4 UNIT

QUIZ	A	10	MTUWTHF	252	E E B
		1	W	252	E E B

E E 355 FIELDS AND WAVES.
PREREQUISITE--E.E. 229 AND 350, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 TO 3/4 UNIT

QUIZ	A	8	MTUWTHF	252	E E B
		1	M	252	E E B

E E 381 PULSE TECHNIQUES.
STUDENTS ARE NOT GIVEN CREDIT TOWARD GRADUATION FOR BOTH E E 347 AND E.E. 381. PREREQUISITE--E.E. 322, 340, AND 341, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 0 TO 1 UNIT

QUIZ	A	10	MTUWTHF	257	E E B
		1	W	257	E E B
LAB	A	2-5	M W	251	E E B

E E 382 TRANSISTOR CIRCUITS.
SAME AS E.E. 383, BUT HAS MORE LABORATORY WORK.
PREREQUISITE--E.E. 340 AND 341, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT

QUIZ	A	9	MTUWTHF	260	E E B
		1	TU	260	E E B
LAB	A	2-5	TU TH	251	E E B

E E 388 ELECTRONIC ANALOG COMPUTERS.
PREREQUISITE--E.E. 340, 341, MATH. 345 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 TO 1 UNIT

QUIZ	A	11	MTUWTHF	162	E E B
		1	TH	162	E E B
LAB	A	ARR			

COURSES FOR GRADUATES

E E 416 ADVANCED CIRCUIT ANALYSIS.
1 UNIT

QUIZ	A	9	MTUWTHF	141	E E B
		1	TU	141	E E B

E E 420 ELECTROMAGNETIC WAVES AND RADIATING SYSTEMS.
PREREQUISITE--GRADUATE STANDING.
1 UNIT

QUIZ	A	11	MTUWTHF	260	E E B
		1	TH	260	E E B

E E 422 ADVANCED COMMUNICATION NETWORKS.
PREREQUISITE--GRADUATE STANDING.
1 UNIT

	A	8	MTUWTHF	141	E E B
		1	M	141	E E B

E E 498 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN ELECTRICAL ENGINEERING.
1/2 TO 2 UNITS
*SECTION B RESTRICTED TO STUDENTS ENROLLED IN UI-NSF INSTITUTE
IN ENGINEERING TECHNOLOGY

QUIZ	A	ARR			
QUIZ	*B	11	MTUWTHF	141	E E B
LAB	*B	8-11	TU TH	50N	E E B
QUIZ	M	10	MTUWTHF	260	E E B
		1	W	260	E E B

E E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR

ENGLISH
INCLUDING ENGLISH LITERATURE AND AMERICAN LITERATURE

ENGLISH LITERATURE

DEPARTMENT OFFICE 109 E B

MAJOR--A COURSE IN SHAKESPEARE AND TWENTY ADDITIONAL HOURS IN ENGLISH--EXCLUDING ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND RHET. 101, 102, 151, 200, 271, 272.
OF THESE TWENTY ADDITIONAL HOURS, SEVENTEEN MUST BE TAKEN IN ENGLISH OR AMERICAN LITERATURE, INCLUDING THREE HOURS FROM EACH OF THE FOLLOWING GROUPS-1--AMERICAN LITERATURE, 2--ENGLISH LITERATURE PRIOR TO 1688, ENGLISH 235, 311, 320, 325, 326, 342, 345, 3--ENGLISH LITERATURE, 1688-1800, ENGLISH 245, 346, 348, 349, 4-ENGLISH LITERATURE, 1800-PRESENT, ENGLISH 246, 263, 264, 265, 266, 281, 282, 283, 284, 382.

FOR UNDERGRADUATE STUDENTS WHO CONTEMPLATE TAKING ADVANCED WORK OR MAJORING IN ENGLISH, THE FOLLOWING SEQUENCE OF COURSES IS SUGGESTED-FRESHMAN YEAR, FIRST SEMESTER, ENGLISH 101, SECOND SEMESTER, ENGLISH 102 OR 103. SOPHOMORE YEAR, FIRST SEMESTER, ENGLISH 121, SECOND SEMESTER, ENGLISH 122. ENGLISH 121 AND 122 ARE THE NORMAL PREREQUISITE TO THE ENGLISH MAJOR. ENGLISH 105 AND 106 MAY ALSO BE REGARDED AS SATISFYING THIS CONDITION. IN EXCEPTIONAL CASES, HOWEVER, THESE COURSES MAY BE REPLACED BY SIX HOURS FROM AMONG ENGLISH 101, 102, 103, AND 123, OR THEY MAY BE TAKEN CONCURRENTLY WITH ADVANCED COURSES.

MINORS--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC-NOT INCLUDING APPLIED MUSIC-COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THEIR DEPARTMENTS EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED.
STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

ENGLISH MAJORS WHO INTEND TO TEACH IN SECONDARY SCHOOLS MUST SEE THE ADVISER ON SPECIAL CURRICULA.

DEPARTMENTAL DISTINCTION--A STUDENT WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT, 4.0 OR HIGHER, MAY EARN DISTINCTION ONLY BY SUCCESSFULLY COMPLETING ENGL 297 AND 298 IN ADDITION TO THE REGULAR REQUIREMENTS FOR HIS MAJOR. THE LEVEL OF DISTINCTION--DISTINCTION, HIGH DISTINCTION, OR HIGHEST DISTINCTION--IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THE COURSE AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR. TO RECEIVE HIGHEST DISTINCTION HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF, IN THE OPINION OF THE INSTRUCTOR IN ENGL. 297 AND 298 AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

MAJOR IN COMPOSITION--SEE RHETORIC AND COMPOSITION.

COURSES FOR UNDERGRADUATES

ENGL 101 INTRODUCTION TO POETRY.
UNDERSTANDING OF POETRY THROUGH THE READING AND DISCUSSION OF REPRESENTATIVE POEMS. THIS COURSE, WITH ENGL. 102 AND 103, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	B	9	MTUWTHF	108	E	B	
		12	TU	108	E	B	

ENGL 102 INTRODUCTION TO THE DRAMA.
UNDERSTANDING OF DRAMA THROUGH THE READING AND DISCUSSION OF REPRESENTATIVE PLAYS. THE READING LIST INCLUDES SELECTIONS FROM GREEK, ELIZABETHAN, MODERN ENGLISH, CONTINENTAL, AND AMERICAN DRAMA. THIS COURSE, WITH ENGL. 101 AND 103, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. *STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	108	E	B	HAMILTON
		12	M	108	E	B	

ENGL 103 INTRODUCTION TO FICTION.
UNDERSTANDING FICTION THROUGH THE READING AND DISCUSSION OF REPRESENTATIVE AMERICAN, BRITISH, AND CONTINENTAL FICTION OF SEVERAL PERIODS AND TYPES. THIS COURSE, WITH ENGL. 101 AND 102, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	C	10	MTUWTHF	108	E B	WASSON
		12	W	108	E B	

ENGL 123 CHIEF MODERN ENGLISH WRITERS.
CONRAD, ELIOT, JOYCE, LAWRENCE, SHAW, YEATS, AND OTHERS. THIS COURSE WITH ENGL. 121 AND 122, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

LECT-DISC	A	8	MTUWTHF	117	E B	BRANDABUR
		12	M	117	E B	

ENGL 131 INTRODUCTION TO SHAKESPEARE.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102. OR DESIGNATION AS AN EDMUND J. JAMES SCHOLAR.
3 HOURS

LECT-DISC	B	9	MTUWTHF	117	E B	C. ROBERTS
		12	TU	117	E B	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 257 SURVEY OF ENGLISH LITERATURE, I.
FROM THE BEGINNING TO 1700. PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	D	11	MTUWTH	114W	E B	M. GOLDMAN
		1-3	TU	114W	E B	

ENGL 258 SURVEY OF ENGLISH LITERATURE,II.
FROM 1700 TO 1900. PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	G	3-5	M W F	108	E B	SCHNEIDER

ENGL 263 EARLY VICTORIAN LITERATURE.
BROWNING, DICKENS, THACKERAY, CARLYLE, DISRAELI, ARNOLD, CHARLOTTE BRONTE AND THE RUBAIYAT.
3 HOURS

LECT-DISC	A	8	MTUWTHF	114W	E B	MILLET
		12	M	114W	E B	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 311 CHAUCER.
3 HOURS, OR 3/4 UNIT

LECT-DISC	C	10	MTUWTHF	205	E B	STILLWELL
		12	W	205	E B	

ENGL 338 TRAGEDY.
COMPARATIVE STUDY OF MASTERPIECES OF SEVERAL PERIODS OF WESTERN CULTURE, WITH MAJOR EMPHASIS ON ANCIENT GREEK AND ROMAN, AND ENGLISH ELIZABETHAN AND STUART DRAMA.
3 HOURS, OR 3/4 UNIT

LECT-DISC	E	1-3	M W	117	E B	RUECKERT

ENGL 342 THE POETRY OF MILTON.
ORIGINS, FORMS, ARTISTIC AND ETHICAL VALUES, MILTONS PLACE IN ENGLISH LITERARY HISTORY.
3 HOURS, OR 3/4 UNIT

LECT-DISC	Y	7-9PM	M WTH	108	E B	ROBINS

ENGL 348 SWIFT, POPE, AND FIELDING.
A STUDY OF THE PRINCIPAL IDEAS AND METHODS OF SATIRE AS REVEALED IN THE WRITINGS OF THREE MAJOR ENGLISH SATIRISTS. WRITTEN REPORTS AND EXTENSIVE READINGS. PREREQUISITE--A COURSE IN ENGLISH LITERATURE.
3 HOURS, OR 3/4 UNIT

LECT-DISC	B	9	MTUWTHF	105	L	H	HAIG
		12	TU	105	L	H	

ENGL 351 THE MID-VICTORIAN NOVEL.
THACKERAY, EMILY BRONTE, MRS. GASKELL, DICKENS, GEORGE ELIOT, TROLLOPE.
3 HOURS, OR 3/4 UNIT

LECT-DISC	D	11	MTUWTH	117	E	B	PATTERSON

ENGL 387 THE STRUCTURE OF ENGLISH.
SAME AS LINGUISTICS 387. A CONSIDERATION OF THE ROLE OF LINGUISTICS IN WRITING AND EVALUATING GRAMMARS, DETAILED TREATMENT OF A GENERATIVE GRAMMAR OF ENGLISH.
3 HOURS, OR 3/4 UNIT
SIXTH HOUR TO BE ARRANGED FOR CONFERENCES.

LECT-DISC	C	10	MTUWTHF	105	L	H	LEES

COURSES FOR GRADUATES

ENGL 403 HISTORY OF THE ENGLISH LANGUAGE.
1 UNIT

LECT-DISC	A	8	MTUWTHF	201	E	B	SMITH
		12	W	201	E	B	

ENGL 412 STUDIES IN SIXTEENTH CENTURY LITERATURE, II.
CONTINUATION OF ENGL. 411.
1 UNIT

LECT-DISC	E	1-3	M W	114E	E	B	GOLDMAN

ENGL 427 STUDIES IN THE ROMANTIC MOVEMENT, I.
1 UNIT

LECT-DISC	B	9	MTUWTH	201	E	B	PATTERSON

ENGL 445 INTRODUCTION TO ADVANCED GRADUATE STUDY.
A CONSIDERATION OF THE METHODS OF LITERARY SCHOLARSHIP. REQUIRED OF ALL CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGLISH.
1/4 UNIT

LECT-DISC	G	3-5	TU	108	E	B	HAIG

ENGL 447 BACKGROUND MATERIALS FOR HIGH SCHOOL TEACHERS OF ENGLISH.
INVESTIGATION OF THE CONTENT THAT IS DESIRABLE IN HIGH SCHOOL LITERATURE AND COMPOSITION.
1 UNIT
JUNE 18-JULY 13

PRACT		8-12	MTUWTHF		B	LAW	HOOK

ENGL 484 PROBLEMS IN TWENTIETH CENTURY ENGLISH LITERATURE.
PREREQUISITE--CONSENT OF INSTRUCTOR, OR A SURVEY OF ENGLISH LITERATURE.
1 UNIT
TOPIC--POST-WAR NOVELS

LECT-DISC	E	1-3	TU TH	114E	E	B	HARKNESS

ENGL 497 INDEPENDENT READING.
A COURSE IN INDIVIDUAL READINGS FROM THE AREAS OF LITERATURE AS OFFERED BY THE DEPARTMENT AT THE ADVANCED UNDERGRADUATE-GRADUATE LEVEL. MAY ONLY BE TAKEN CONCURRENTLY WITH A 300-LEVEL COURSE. NO STUDENT MAY OFFER MORE THAN A TOTAL OF 1/2 UNIT OF ENGL. 497.
PREREQUISITE--CONSENT OF INSTRUCTOR OF REQUISITE 300-LEVEL COURSE.
1/4 UNIT

CONF		ARR	ALTENBERND, LEES, ROBINS, PATTERSON, HAIG, RUECKERT STILLWELL

ENGL 499 THESIS RESEARCH.
GUIDANCE IN WRITING THESES FOR ADVANCED DEGREES.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
BARKER, EVANS, GETTMAN, GOLDMAN, HAIG, HARKNESS, HERRICK, HOLADAY, HOOK, KRIEGER, MCBURNEY, MILLIGAN, ORNSTEIN, KASKE, LEES PAULSON, ROBERTS, ROBINS, ROGERS, SHATTUCK, SMALLEY, SMITH, STILLINGER, STILLWELL, AND WILSON
CONF ARR

AMERICAN LITERATURE

DEPARTMENT OFFICE 109 E B

COURSES FOR UNDERGRADUATES

ENGL 113 CLASSIC AMERICAN AUTHORS BEFORE THE CIVIL WAR.
AN INTRODUCTION TO FRANKLIN, POE, EMERSON, HAWTHORNE, MELVILLE, WHITMAN, AND OTHERS.
CREDIT IS NOT GIVEN FOR ENGL. 113 IN ADDITION TO ENGL. 255.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

LECT-DISC	D	11	MTUWTHF	108	E B	MICHEL
		12	TH	108	E B	

ENGL 114 CLASSIC AMERICAN AUTHORS AFTER THE CIVIL WAR TO THE PRESENT.
AN INTRODUCTION TO MARK TWAIN, JAMES, DREISER, HEMINGWAY, ONEILL, FROST AND OTHERS. CREDIT IS NOT GIVEN FOR ENGL. 114 IN ADDITION TO ENGL. 256. PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

LECT-DISC	C	10	MTUWTHF	117	E B	CURTIN
		12	W	117	E B	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 255 SURVEY OF AMERICAN LITERATURE, I.
A COMPREHENSIVE HISTORICAL SURVEY OF AMERICAN LITERATURE AND ITS CULTURAL BACKGROUND FROM 1607 TO THE CIVIL WAR. CREDIT IS NOT GIVEN FOR BOTH ENGL. 113 AND 255.
3 HOURS

LECT-DISC	B	9	MTUWTHF	114W	E B	ALTENBERND
		12	TU	114W	E B	

ENGL 256 SURVEY OF AMERICAN LITERATURE, II.
A COMPREHENSIVE HISTORICAL SURVEY OF AMERICAN LITERATURE AND ITS CULTURAL BACKGROUND FROM THE CIVIL WAR TO THE MID-TWENTIETH CENTURY.
CREDIT IS NOT GIVEN FOR BOTH ENGL. 114 AND 256.
3 HOURS

LECT-DISC	C	10	MTUWTHF	114W	E B	HASKELL
		12	W	114W	E B	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 385 THEMES AND MOVEMENTS IN AMERICAN LITERATURE.
3 HOURS, OR 3/4 UNIT
TOPIC--EUROPE AND AMERICA IN AMERICAN LITERATURE.

LECT-DISC	A	8	MTUWTHF	205	E B	ALTENBERND
		12	M	205	E B	

ENGL 438 STUDIES IN AMERICAN LITERATURE AFTER 1800.
PREREQUISITE--SURVEY COURSE IN AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
1 UNIT
TOPIC--EMERSON, HAWTHORNE, MELVILLE, AND WHITMAN
LECT-DISC D 11 MTUWTH 205 E B FOGLE

ENGL 488 PROBLEMS IN AMERICAN LITERATURE AND CULTURE.
STUDENTS MAY REPEAT COURSE FOR CREDIT.
PREREQUISITE--A SURVEY OF AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
1 UNIT
TOPIC--SYMBOL AND STRUCTURE IN HAWTHORNES FICTION
LECT-DISC C 10 MTUWTH 201 E B FOGLE

ENGL 497 INDEPENDENT READING.
A COURSE IN INDIVIDUAL READINGS FROM THE AREAS OF LITERATURE AS OFFERED BY THE DEPARTMENT AT THE ADVANCED UNDERGRADUATE-GRADUATE LEVEL. MAY ONLY BE TAKEN CONCURRENTLY WITH A 300-LEVEL COURSE. NO STUDENT MAY OFFER MORE THAN A TOTAL OF 1/2 UNIT OF ENGL. 497.
PREREQUISITE--CONSENT OF INSTRUCTOR OF REQUISITE 300-LEVEL COURSE.
1/4 UNIT
CONF ARR ALTENBERND

ENGL 499 THESIS RESEARCH.
GUIDANCE IN WRITING THESES FOR ADVANCED DEGREES.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
DAVIDSON, FLANAGAN, KELLEY
LYNEN, PAUL, AND SCOTT.
CONF ARR

ENTOMOLOGY

DEPARTMENT OFFICE 100C H H

MAJOR--TWENTY HOURS IN ENTOMOLOGY, EXCLUDING ENTOM. 101, 103, AND 131. ZOOL. 318 AND 321 MAY BE APPLIED FOR MAJOR CREDIT. AT LEAST FIVE HOURS MUST BE TAKEN FROM THE ADVANCED GROUP.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--AGRONOMY, BOTANY, CHEMISTRY, HORTICULTURE, MICROBIOLOGY, PHYSIOLOGY, AND ZOOLOGY.

AS A GENERAL POLICY, STUDENTS WHO CONTEMPLATE EVENTUAL CAREERS IN ENTOMOLOGY ARE URGED TO USE THE UNDERGRADUATE YEARS TO GAIN THOROUGH GROUNDING IN THE FUNDAMENTALS OF PHYSICAL AND BIOLOGICAL SCIENCE, IN MATHEMATICS AND THE OTHER LIBERAL ARTS, AND IN THE TECHNIQUES OF COMMUNICATION. THE DEPARTMENT IS GLAD TO ADVISE STUDENTS IN REGARD TO THE MOST EFFECTIVE SCHEDULE OF STUDY TO SUIT THEIR PARTICULAR NEEDS.

ENTOM. 101 AND 103 ARE OPEN TO FRESHMEN, AND 131 TO SOPHOMORES, WITHOUT PREREQUISITES. PREREQUISITES FOR OTHER COURSES ARE INDICATED BELOW.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENTOM 306 SPECIAL PROBLEMS.
PREREQUISITE--ANY OF THE FOLLOWING--ENTOM. 131, 301, 302, 317, 319, 322, OR ZOOL. 101 OR 321, SENIOR STANDING. CANDIDATES FOR HONORS AND TUTORIAL WORK SHOULD REGISTER IN THIS COURSE. MAY BE TAKEN BY STUDENTS WHO CAN ONLY ATTEND CLASSES SATURDAY MORNING.
2 TO 5 HOURS, OR 1/4 TO 1 UNIT
ARR STAFF

ENTOM 312 ENTOMOLOGY FOR TEACHERS.
RECOGNITION OF THE CHIEF ORDERS OF INSECTS IN THEIR IMMATURE AND ADULT STAGES. HOW THEY DEVELOP. LIFE CYCLES. FOOD. HABITATS. ADAPTATIONS FOR FEEDING. OVIPOSITION. MOVEMENT. PROTECTION. DEFENSE. MAKING SOUND AND OTHER FUNCTIONS. INTERRELATIONS WITH OTHER ORGANISMS AND ENVIRONMENT. SOCIAL LIFE. A COLLECTION OF INSECTS IS MOUNTED. LABELED. AND IDENTIFIED. FIELD TRIPS. LABORATORY. AND DISCUSSIONS. PREREQUISITE--ONE YEAR OF BIOLOGY. BOTANY. ZOOLOGY OR EQUIVALENT.
3 HOURS. OR 1/2 UNIT
*SECTION B OPEN ONLY TO VOCATIONAL AGRICULTURE TEACHERS ENROLLING FOR THE FIRST FOUR WEEKS ONLY--TWO ADDITIONAL HOURS TO BE ARRANGED.

LAB-DISC	A	10-12	MTUW F	310	H H		WALDBAUER
LAB-DISC	*B	10-12	MTUWTHF	310	H H		WALDBAUER

COURSES FOR GRADUATES

ENTOM 499 THESIS--RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--MORPHOLOGY AND EMBRYOLOGY OF INSECTS CHADWICK. STERNBURG
B--APPLIED ENTOMOLOGY DECKER. HORSFALL. KEARNS. MILUM
C--SYSTEMATIC ENTOMOLOGY DOWNES. ROSS. SELANDER
D--BIOLOGY AND ECOLOGY OF INSECTS HORSFALL
E--INSECT PHYSIOLOGY CHADWICK. FRAENKEL. WALDBAUER
*MAY BE TAKEN SATURDAY MORNING.

LAB	*	ARR					STAFF

FINANCE

DEPARTMENT OFFICE 311 D K H

REQUIREMENTS FOR L.A.S. STUDENTS

MAJOR--TWENTY HOURS IN FINANCE. A FINANCE MAJOR WHO CHOOSES ECONOMICS AS A MINOR MUST INCLUDE ALSO TWELVE HOURS IN A SECOND MINOR.

ECON. 108 OR ECON. 102 AND 103. ARE FUNDAMENTAL COURSES IN ECONOMICS AND ARE PREREQUISITES FOR COURSES IN FINANCE. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN FINANCE SHOULD TAKE ECON. 108. OR ECON. 102 AND 103. IN THEIR SOPHOMORE YEAR. LIBERAL ARTS MAJORS IN FINANCE ARE ADVISED STRONGLY TO ELECT ACCY. 201 AND A COURSE IN STATISTICS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS. WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY. ECONOMICS. GEOGRAPHY. GEOLOGY. HISTORY. LAW. MATHEMATICS. PHILOSOPHY. POLITICAL SCIENCE. PSYCHOLOGY. SOCIOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES IS ACCEPTED AS A MINOR.

COURSES FOR ADVANCED UNDERGRADUATES

FIN 250 MONEY. CREDIT. AND BANKING.
PREREQUISITE--ECON. 102 AND 103. OR 108.
3 HOURS

LECT-DISC	C	10	MTUWTHFS	123	D K H		KILBRIDE

FIN 254 BUSINESS FINANCE.
PREREQUISITE--ECON. 102 AND 103. OR 108. ACCY. 105 OR 201.
3 HOURS

LECT-DISC	B	9	MTUWTHFS	123	D K H		SWANSON
LECT-DISC	D	11	MTUWTHFS	123	D K H		OSBORN

FIN 258 THE MONEY MARKET AND AMERICAN FINANCIAL INSTITUTIONS.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	322	D K H		NOLEN

FIN 259 INVESTMENT.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	11	MTUWTHFS	322	D K H		KILBRIDE

FIN 290 HONORS COURSE.
SENIOR CANDIDATES FOR GRADUATION WITH HONORS OR HIGH HONORS SHOULD ELECT ONE OR THE OTHER OF THE FOLLOWING OPTIONS--OPTION A--AN ACCEPTABLE THESIS IN FINANCE--OPTION B--A COMPREHENSIVE EXAMINATION SIX HOURS IN LENGTH, COVERING A REVIEW OF FINANCE.
2 TO 4 HOURS

CONF		ARR					OSBORN

FIN 295 SENIOR SEMINAR IN FINANCE, II.
A RESEARCH AND READINGS COURSE FOR STUDENTS CONCENTRATING IN FINANCE, INSURANCE, AND URBAN LAND ECONOMICS. EMPHASIS IS ON CURRENT PROBLEMS IN THE AREA OF THE STUDENTS INTEREST. SENIORS REGISTERED IN THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION WITH CONSENT OF THE HEAD OF THE DEPARTMENT, MAY DO INDEPENDENT STUDY FOR A TOTAL OF NOT MORE THAN TEN SEMESTER HOURS IN THIS DEPARTMENT OR SIXTEEN SEMESTER HOURS IF DIVIDED BETWEEN THIS AND ANY OTHER DEPARTMENT. PREREQUISITE--SENIOR STANDING, CONSENT OF DEPARTMENTAL ADVISER.
3 TO 5 HOURS

CONF		ARR					OSBORN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

FIN 369 URBAN LAND PROBLEMS.
PREREQUISITE--FIN. 368 OR CONSENT OF INSTRUCTOR.
REGISTRATION ONLY BY PERMISSION OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
DURING THE 1962 SUMMER SESSION THIS SPECIAL WORKSHOP COURSE WILL CARRY 2 HOURS UNDERGRADUATE CREDIT AND NO GRADUATE CREDIT.
JUNE 18 TO JUNE 30, 1962

LECT-DISC		830-12	MTUWTHF	215	D K H		
		1-330	MTUWTHF	215	D K H		LEONARD
		830-12	S	215	D K H		LEONARD

COURSES FOR GRADUATES

FIN 454 CORPORATION FINANCE.
PREREQUISITE--FIN. 254.
1 UNIT

LECT-DISC	A	8-10	M TH	419	D K H		OSBORN

FIN 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT

CONF		ARR					NOLEN

FIN 499 THESIS RESEARCH.
REQUIRED OF ALL STUDENTS WRITING MASTERS AND DOCTORS THESES IN FINANCE.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

		4-6	TH	419	D K H		NOLEN

FOOD TECHNOLOGY.
INCLUDING DAIRY TECHNOLOGY

DEPARTMENT OFFICE 213 M H

COURSES FOR GRADUATES

F T 481 ADVANCED STUDIES IN FOOD TECHNOLOGY.
1/2 TO 2 UNITS
ARR STAFF

F T 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR STAFF

DAIRY TECHNOLOGY

OFFICE 104 D M B

COURSES FOR GRADUATES

D T 491 ASSIGNED PROBLEMS IN DAIRY TECHNOLOGY.
PREREQUISITE--GRADUATE STANDING IN DAIRY TECHNOLOGY.
1/2 TO 2 UNITS
ARR STAFF

D T 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR STAFF

FORESTRY

DEPARTMENT OFFICE 219 M H

COURSES FOR ADVANCED UNDERGRADUATES

THE FORESTRY COURSES FOR ADVANCED UNDERGRADUATES ARE DESIGNED PRIMARILY FOR STUDENTS WHO ARE CANDIDATES FOR THE PROFESSIONAL DEGREE OF BACHELOR OF SCIENCE IN FORESTRY IN EITHER THE FOREST PRODUCTION OR WOOD TECHNOLOGY AND UTILIZATION CURRICULUM. OTHER STUDENTS ARE ADMITTED TO MOST OF THESE COURSES, HOWEVER, IF THEY HAVE THE PREREQUISITES OR THE CONSENT OF THE INSTRUCTOR.

FOR 211 INTRODUCTION TO SILVICS AND SILVICULTURE--SUMMER CAMP.
THE FOREST AS A COMPLEX BIOLOGICAL UNIT. THIS COURSE INTRODUCES THE STUDY OF HOW FORESTS ARE AFFECTED BY THE CLIMATIC, EDAPHIC, AND BIOLOGICAL FACTORS OF ENVIRONMENT, THE INTERACTION OF THE VARIOUS ELEMENTS IN THE FOREST COMMUNITY, THE EFFECTS OF FORESTS ON THEIR ENVIRONMENT, AND THE APPLICATION OF SILVICULTURAL PRACTICES IN WOOD PRODUCTION. FIELD EXERCISES, OBSERVATION, AND REPORTS. PREREQUISITES--REGISTRATION IN SUMMER CAMP.
3 HOURS
ARR BOGGESS, LORENZ, SPAETH

FOR 221 FOREST MENSURATION--SUMMER CAMP.
AN INTRODUCTORY COURSE DESIGNED TO ACQUAINT THE STUDENTS WITH THE METHODS AND PROBLEMS OF MEASURING FOREST TREES, AREAS, AND FOREST PRODUCTS, WITH EMPHASIS ON FIELD WORK. INCLUDES ELEMENTARY WORK ON TREE MEASUREMENT AND VOLUME, BOARD MEASURE, SCALING, AND THE LOCATION, MAPPING, AND INVENTORY OF FOREST PROPERTIES. PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
ARR JOKELA, HARKIN

FOR 231 WOOD UTILIZATION--SUMMER CAMP.
FIELD AND CLASS EXERCISES IN LOGGING, MILLING, EQUIPMENT MAINTENANCE, AND USE, THE INDUSTRIAL ASPECTS OF WOOD USE. PREREQUISITE--REGISTRATION IN SUMMER CAMP.
2 HOURS
ARR GUIHER

FRENCH

DEPARTMENT OFFICE 242 L H

MAJOR--TWENTY HOURS IN FRENCH, EXCLUDING FRENCH 101, 102, 103, 113, AND INCLUDING FR. 201, 202, 211, 212 AND AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. STUDENTS ARE ALSO STRONGLY ADVISED TO TAKE A YEARS WORK--TWO COURSES IN EUROPEAN HISTORY AND A YEARS WORK--TWO COURSES--IN ENGLISH LITERATURE. COURSES PARTICULARLY SUITABLE FOR THIS PURPOSE ARE--HIST. 111-112, 211-212, 309-310, 311-312, 313-314, 323-324. ENGL. 101, 102, 103, 105, 106, 121, 122, 123, 131, 231, 232, 245, 246, 251, 252, 253, 257, 258, 263, 264, 281, 282, 283, 284, 363.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT IF TWO ARE CHOSEN--EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR UNDERGRADUATES

FR 101 ELEMENTARY COURSE.
FOR STUDENTS WHO HAVE NO CREDIT IN FRENCH. NO CREDIT TOWARD GRADUATION IS GIVEN FOR FRENCH 101 WITHOUT FRENCH 102.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL.
LECT-DISC C1 10-12 MTUWTH 104 L H
LECT-DISC C2 10-12 MTUWTH 303C L H

FR 102 ELEMENTARY COURSE.
CONTINUATION OF FRENCH 101. PREREQUISITE--FRENCH 101 OR ONE YEAR OF HIGH SCHOOL FRENCH.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL.
LECT-DISC 10-12 MTUWTH 321 L H

FR 103 MODERN FRENCH.
PREREQUISITE--FRENCH 102 OR TWO YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
LECT-DISC 8-10 MTUWTH 321 L H

FR 104 MODERN FRENCH.
CONTINUATION OF FRENCH 103. PREREQUISITE--FRENCH 103 OR THREE YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
LECT-DISC 8-10 MTUWTH 104 L H

COURSES FOR ADVANCED UNDERGRADUATES

FR 201 INTRODUCTION TO FRENCH LITERATURE.
PREREQUISITE--FRENCH 104 OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS

LECT-DISC		11	MTUWTHFS	233	L H	GULLETTE

FR 211 ORAL FRENCH.
PREREQUISITE--FR. 104, OR 103 AND 113, OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS

LECT-DISC	A1	8	MTUWTH	240	L H	ABRAHAM
LECT-DISC	A2	8	MTUWTH	316N	M H	JAHIEL

FR 212 ORAL FRENCH.
PREREQUISITE--FR. 211. WITH PERMISSION, FR. 212 MAY BE TAKEN WITH 211 IN THE SUMMER SESSION.
3 HOURS

LECT-DISC	B1	9	MTUWTH	240	L H	SPRIET
LECT-DISC	B2	9	MTUWTH	316N	M H	JAHIEL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED UNDERGRADUATE COURSES IN FRENCH EXCEPT FR. 382 HAVE THE FOLLOWING PREREQUISITE--FRENCH 201 AND 202 OR EQUIVALENT.

FR 318 MODERN FRENCH DRAMA, II.
2 HOURS, OR 1/2 UNIT

LECT-DISC		11	MTUWTH	240	L H	JAHIEL

FR 336 CIVILISATION FRANCAISE, II.
PREREQUISITE--FR. 201 AND 202 OR EQUIVALENT.
STUDENTS WILL BE EXPECTED TO ATTEND A SERIES OF SUPPLEMENTARY DEMONSTRATIONS AND LECTURES NOT TO EXCEED ONE MEETING PER WEEK.
2 HOURS, OR 1/2 UNIT

LECT-DISC		3	MTUWTH	205	G H	SPRIET, ABRAHAM

FR 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS SPAN. 382, GER. 382, RUSS. 382. INSTRUCTION AND PRACTICE IN THE TECHNIQUES OF MAKING FOREIGN-LANGUAGE TAPES AND INTEGRATING THEM WITH CLASSROOM ACTIVITY. INSTRUCTION IN THE PROBLEMS OF PLANNING AND OPERATING A LANGUAGE LABORATORY. PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC		10	MTUWTH	224	L H	NACHTMANN

COURSES FOR GRADUATES

FR 400 BEGINNING FRENCH FOR GRADUATE STUDENTS.
*NO GRADUATE CREDIT.
*4 HOURS

LECT-DISC	A1	8-10	MTUWTH	233	L H	
LECT-DISC	A2	8-10	MTUWTH	302	L H	
LECT-DISC	C	10-12	MTUWTH	302	L H	
LECT-DISC	G1	3-5	MTUWTH	111	G H	
LECT-DISC	G2	3-5	MTUWTH	219	G H	

FR 401 READING FRENCH FOR GRADUATE STUDENTS.
PREREQUISITE--FRENCH 400, OR FRENCH 101 AND 102, OR EQUIVALENT.
*NO GRADUATE CREDIT.
*4 HOURS

LECT-DISC	A	8-10	MTUWTH	303C	L H	
LECT-DISC	E1	1-3	MTUWTH	104	L H	
LECT-DISC	E2	1-3	MTUWTH	233	L H	

FR 407 ADVANCED FRENCH DICTION.
IT IS RECOMMENDED THIS COURSE AND FR. 409 BE TAKEN CONCURRENTLY.
1/2 UNIT

LECT-DISC	1	MTUWTH	240	L H	VIENS

FR 409 THE PHONETICS OF FRENCH.
IT IS RECOMMENDED THAT THIS COURSE AND FRENCH 407 BE TAKEN CONCURRENTLY.
1/2 UNIT

LECT-DISC	2	MTUWTH	217	G H	KNUDSON

FR 433 VILLON. RABELAIS.
PREREQUISITE--GRADUATE STANDING IN FRENCH
1 UNIT

LECT-DISC	4	MTUWTH	217	G H	SPRIET. KNUDSON

FR 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN FRENCH.
1/4 TO 1 UNIT

CONF	ARR				STAFF

FR 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR				STAFF

GENERAL ENGINEERING

DEPARTMENT OFFICE 117 T B

SPECIAL SUMMER COURSE FOR HIGH SCHOOL STUDENTS

G E 010 SUMMER SCIENCE TRAINING PROGRAM FOR HIGH SCHOOL STUDENTS.
THIS PROGRAM IS DESIGNED TO FAMILIARIZE SELECTED HIGH SCHOOL STUDENTS WITH PAST ACHIEVEMENTS. CURRENT RESEARCH AND PRACTICE. AND FUTURE NEEDS IN SCIENCE AND ENGINEERING. ENROLLMENT IS LIMITED TO SUCCESSFUL APPLICANTS TO A 6 WEEK SUMMER SCIENCE TRAINING PROGRAM SPONSORED BY THE NATIONAL SCIENCE FOUNDATION TO BE HELD FROM JUNE 25 TO AUGUST 3. NO CREDIT

A	8-12	MTUWTHF	216	T B	DOBROVOLNY.
	1-4	MTUWTHF	216	T B	LARSON AND
	8-12	MTUWTHF	201	T B	MARTIN
	1-4	MTUWTHF	201	T B	

COURSES FOR UNDERGRADUATES

G E 101 ENGINEERING GRAPHICAL COMMUNICATION.
PREREQUISITE--PLANE GEOMETRY.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LAB-DISC	A4	7-9	MTUWTHFS	306	T B	NELSON

G E 102 ENGINEERING GEOMETRY.
PREREQUISITE--G E 101.
3 HOURS

LAB-DISC	A2	8-10	MTUWTHFS	303	T B	REYES-GUERRA

COURSES FOR ADVANCED UNDERGRADUATES

G E 220 HISTORY OF ENGINEERING.
STUDY OF THE IMPORTANT ELEMENTS IN THE GROWTH OF THE ART AND SCIENCE OF ENGINEERING FROM ANCIENT TIMES TO THE PRESENT. LIVES OF SOME OF THE MEN WHO HAVE BEEN LEADERS. EFFECT OF ENGINEERING ON THE SOCIAL CONDITIONS OF THE VARIOUS PERIODS. PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS

LAB-DISC	F	1-230	MTU THF	206	T B	JEWETT

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

G E 393 SPECIAL PROBLEMS.
STUDY OF ADVANCED PROBLEMS RELATED TO GENERAL ENGINEERING AND GRAPHICS. PREREQUISITE--SENIOR STANDING AND CONSENT OF INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 TO 1 UNIT
*SECTIONS A AND B ARE RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. THESE SECTIONS WILL BE A STUDY OF TECHNICAL EDUCATION PROBLEMS AND WILL CARRY 1 UNIT OF CREDIT.

LAB-DISC	*A	8	M W F	105	T B	PLACEK
		1	TU TH	105	T B	PLACEK
		1-3	M W F	114	T B	DOBROVOLNY
LAB-DISC	*B	9	M W F	105	T B	PLACEK
		2	TU TH	105	T B	PLACEK
		1-3	M W F	114	T B	DOBROVOLNY

GEOGRAPHY

DEPARTMENT OFFICE 220 D H

MAJOR--TWENTY HOURS IN GEOGRAPHY IN ADDITION TO GEOGRAPHY 101. AT LEAST FIFTEEN OF THE TWENTY HOURS MUST BE IN COURSES CARRYING ADVANCED CREDIT. INDIVIDUAL PROGRAMS ARE ARRANGED FOR MAJOR STUDENTS WITH THE FOLLOWING SPECIAL INTERESTS--LIBERAL EDUCATION. BUSINESS. CARTOGRAPHY. GOVERNMENT. TEACHING. OR GRADUATE STUDY. THESE PROGRAMS INCLUDE DEPARTMENTAL COURSES. MINOR FIELDS. AND RECOMMENDED ELECTIVES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS IN DEPARTMENTS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED IN CONSULTATION WITH THE DEPARTMENTAL ADVISER AND WITH THE APPROVAL OF THE DEAN OF THE COLLEGE. AT LEAST EIGHT HOURS OF THE TWENTY MINOR HOURS MUST BE TAKEN IN EACH IF THE STUDENT ELECTS TO MINOR IN TWO DIFFERENT DEPARTMENTS.

DEPARTMENTAL DISTINCTION--STUDENTS ELIGIBLE FOR GRADUATION WITH HONORS IN LIBERAL ARTS AND SCIENCES SHOULD CONSULT WITH THE DEPARTMENTAL ADVISER CONCERNING GRADUATION WITH DISTINCTION IN GEOGRAPHY.

COURSES FOR UNDERGRADUATES

GEOG 101 ELEMENTS OF GEOGRAPHY.
THE GEOGRAPHIC POINT OF VIEW, ELEMENTS OF THE PHYSICAL LANDSCAPE, PLANETARY RELATIONS, WEATHER, CLIMATE, CLIMATIC REGIONS, LANDFORMS, NATURAL RESOURCES. GEOG. 101 AND 111 MEET THE GENERAL EDUCATION REQUIREMENT IN THE PHYSICAL SCIENCES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, GEOG. 101 AND 104 MEET THE GENERAL EDUCATION REQUIREMENT IN THE SOCIAL SCIENCES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. MR. ALEXANDER IS IN CHARGE.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT	B	9	MTUWTH	323	D H	ROEPKE
QUIZ		3-5	TUWTH	323	D H	

GEOG 111 INTRODUCTORY METEOROLOGY.
THE ATMOSPHERE, ITS COMPOSITION, FUNCTIONS, AND BEHAVIOR IN THE PRODUCTION OF VARIOUS WEATHER TYPES, AIR MASSES, FORECASTING, APPLICATION TO PRESENT DAY ACTIVITIES. GEOG. 111 AND 101 MEET THE GENERAL EDUCATION REQUIREMENT IN PHYSICAL SCIENCES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. PREREQUISITE--GEOG. 101 OR CONSENT OF INSTRUCTOR.
3 HOURS

LECT-DISC		750-850	MTUWTHF	323	D H	PAGE

GEOG 114 CONSERVATION OF NATURAL RESOURCES.
ELEMENTS OF THE CONSERVATION OF NATURAL RESOURCES--SOILS, WATER, BIOTIC, MINERAL, RECREATIONAL--WITH EMPHASIS GIVEN TO THE GENERAL PRINCIPLES OF CONSERVATION AS THEY APPLY TO THE UNITED STATES. PREREQUISITE--SOPHOMORE STANDING.
3 HOURS

LECT		11	TUWTHF	323	D H	BOOTH
LAB		1-3	M	323	D H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOG 353 GEOGRAPHY OF THE U S S R.
PHYSICAL AND CULTURAL REGIONALISM, A SURVEY OF NATURAL RESOURCES AND PATTERNS OF HUMAN OCCUPANCE INCLUDING INDUSTRY, AGRICULTURE, AND TRANSPORTATION. PREREQUISITE--EIGHT HOURS OF GEOGRAPHY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	B	9	MTUWTH	113	D H	FELLMANN
		1-3	TU	113	D H	

GEOG 361 GEOGRAPHY OF AGRICULTURAL LAND UTILIZATION.
A GEOGRAPHIC CONSIDERATION OF THE NATURE OF AGRICULTURAL LAND UTILIZATION FROM THE WORLD, CONTINENTAL, AND REGIONAL VIEWPOINTS, WITH SPECIAL EMPHASIS ON THE GEOGRAPHICAL IMPLICATIONS OF VARIOUS TYPES OF AGRICULTURAL LAND USE AND ON THE INTERRELATIONSHIPS BETWEEN AREAS OF DIFFERENT TYPES OF LAND UTILIZATION.
3 HOURS, OR 1/2 UNIT

LECT-DISC	C	10	MTUWTH	323	D H	ROEPKE
		1-3	W	323	D H	

GEOG 371 INTRODUCTION TO RESEARCH.
INTRODUCTORY TRAINING IN THE TECHNIQUES AND SOURCE MATERIALS OF GEOGRAPHIC RESEARCH. LIMITED TO STUDENTS WHOSE MAJOR IS GEOGRAPHY AND TO SENIORS WHOSE MAJOR IS IN OTHER DEPARTMENTS BUT WHO HAVE TWELVE HOURS OF GEOGRAPHY.
2 HOURS, OR 1/2 UNIT

ARR FELLMANN

COURSES FOR GRADUATES

GEOG 478 ADVANCED FIELD GEOGRAPHY.
A GRADUATE COURSE IN THE THEORY AND APPLICATION OF GEOGRAPHICAL FIELD TECHNIQUES TO THE ANALYSIS OF AREAS, CULMINATING IN INDIVIDUAL REPORTS ON ASSIGNED PROBLEMS IN THE FIELD COURSE AREA. PREREQUISITE--GRADUATE STANDING IN GEOGRAPHY.
1 1/4 TO 2 UNITS

FIELD CAMP, ALLERTON PARK FOSTER

GEOG 495 ADVANCED STUDIES IN GEOGRAPHY.
1/2 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--

U.S.S.R.	FELLMANN
ECONOMIC GEOGRAPHY	ROEPKE
URBAN GEOGRAPHY	FELLMANN
PROBLEMS OF GEOGRAPHY	STAFF

ARR FELLMANN
ROEPKE

GEOG 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
ARR STAFF

GEOLOGY

DEPARTMENT OFFICE 234 N H

MAJOR--TWENTY HOURS IN GEOLOGY, EXCLUDING GEOL. 101, PHYSICAL GEOLOGY, 105, AGRICULTURAL GEOLOGY, AND 150, GEOLOGY FOR ENGINEERS. THE FOLLOWING COURSES, IN ADDITION TO GEOL. 101, PHYSICAL GEOLOGY, ARE FUNDAMENTAL FOR A MAJOR IN GEOLOGY--102, HISTORICAL GEOLOGY, 131 AND 132, MINERALOGY, 301, GEOMORPHOLOGY, 311, STRUCTURAL GEOLOGY 320, PALEONTOLOGY, 321, STRATIGRAPHY, 317, FIELD GEOLOGY IN THE ROCKY MOUNTAINS, G E 205, APPLIED DESCRIPTIVE GEOMETRY IN GEOLOGICAL PROBLEMS, CHEM. 101 OR 102, GENERAL CHEMISTRY, PHYSICS 101, GENERAL PHYSICS, MATH. 112, COLLEGE ALGEBRA, MATH. 114, TRIGONOMETRY, AND MATH. 123 OR 122, ANALYTIC GEOMETRY.

STUDENTS ARE ADVISED TO TAKE MATH. 132 AND 142, OR MATH. 133 AND 143 CALCULUS, AND PHYSICS 102, GENERAL PHYSICS.

STUDENTS WHOSE PRIMARY INTEREST IS MINERALOGY, PETROLOGY, AND MINERAL DEPOSITS SHOULD ALSO TAKE CHEM. 105, INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS, AND CHEM. 245 AND 246, PHYSICAL CHEMISTRY FOR ENGINEERS, OR THE EQUIVALENT. IT IS ALSO ADVISABLE FOR SUCH STUDENTS TO TAKE GEOL. 335, OPTICAL MINERALOGY, AND GEOL. 336, PETROGRAPHY, DURING THE SENIOR YEAR.

MINORS--TWENTY HOURS CHOSEN FROM ONE OR TWO OF THE FOLLOWING SUBJECTS--ASTRONOMY, BOTANY, CHEMISTRY, CIVIL ENGINEERING, ECONOMICS GEOGRAPHY, MATHEMATICS, MINING ENGINEERING, PHYSICS, AND ZOOLOGY, AFTER CONSULTATION WITH THE DEPARTMENT OF GEOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

DEPARTMENTAL DISTINCTION--ONLY THOSE STUDENTS WHO HAVE CREDIT IN GEOL. 290 AND WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. EACH STUDENT WHO DESIRES TO REGISTER MUST OBTAIN A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK AND PRESENT IT TO THE HEAD OF THE DEPARTMENT AT THE TIME OF REGISTRATION.

NOTE--CERTAIN GEOLOGY COURSES ARE OFFERED ONLY IN ALTERNATE YEARS--324, VERTEBRATE PALEONTOLOGY, 401, ADVANCED DYNAMIC GEOLOGY, 402, ADVANCED HISTORICAL GEOLOGY, 428, PALYNOLOGY.

AT LEAST ONE YEAR OF GRADUATE WORK IS NECESSARY AS FURTHER TRAINING FOR ALL PROFESSIONAL WORK IN GEOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

GEOL 290 INTRODUCTION TO RESEARCH
EACH STUDENT WHO DESIRES TO REGISTER MUST PRESENT TO THE HEAD OF THE DEPARTMENT A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK. ONLY THOSE STUDENTS WHO WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. CREDIT TO BE ARRANGED.
ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOL 317 FIELD GEOLOGY IN THE ROCKY MOUNTAINS.
FIELD COURSE TO BE CONDUCTED FROM A LOCALITY IN THE ROCKY MOUNTAINS. FIELD TRAINING IN STRATIGRAPHY, STRUCTURE AND GEOMORPHOLOGY. GEOLOGIC MAPPING WITH PLANE TABLE AND AERIAL PHOTOGRAPHS. APPROXIMATE COST $250 TO $305. PREREQUISITE--GEOL. 102 AND CONSENT OF INSTRUCTOR.
8 HOURS, OR 2 UNITS
ARR CROPP, STAFF

COURSES FOR GRADUATES

GEOL 493 ADVANCED STUDIES IN GEOLOGY.
1/2 TO 2 UNITS

CLAY MINERALOGY	GRIM
ENGINEERING GEOLOGY	DEERE, HOUGH
GEOMORPHOLOGY AND GLACIAL GEOLOGY	SHAFFER, WHITE
GEOTECTONICS	CAROZZI
GROUND-WATER GEOLOGY	MAXEY
MICROPALEONTOLOGY	SCOTT
MINERAL DEPOSITS	HAGNER
MINERALOGY AND CRYSTALLOGRAPHY	HENDERSON
PALEOBOTANY--SEE BOT. 493	KOSANKE, STEWART
PALEONTOLOGY	HAY, SCOTT
PENNSYLVANIAN STRATIGRAPHY	WANLESS
PETROGRAPHY AND PETROLOGY	CHAPMAN
SEDIMENTARY PETROLOGY	CAROZZI, HOUGH, WANLESS
STRATIGRAPHY	LANGENHEIM, SCOTT

ARR

GEOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GERMAN

DEPARTMENT OFFICE 211 L H

MAJOR--TWENTY HOURS IN GERMAN, EXCLUDING GERMAN 101, 102, 103, AND 113, AND INCLUDING AT LEAST SIX HOURS IN COURSES IN THE 300 GROUP--NORMALLY 301 AND 302--OR EQUIVALENT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO SUBJECTS CHOSEN FROM THE FOLLOWING LIST, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT--EDUCATION ENGLISH--EXCLUDING RHET. 101, 102, AND 200--FRENCH, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, LINGUISTICS--EXCLUDING LING. 301--MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, RUSS. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT LANGUAGE.

COURSES FOR UNDERGRADUATES

GER 101 ELEMENTARY COURSE.
NO CREDIT TOWARD GRADUATION IS GIVEN FOR GERMAN 101 WITHOUT GERMAN 102.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
TIME TO BE ARRANGED.
LECT-DISC A 8-10 MTUWTH 172 ARMORY

GER 102 ELEMENTARY COURSE.
CONTINUATION OF GERMAN 101. PREREQUISITE--GERMAN 101 OR ONE YEAR OF HIGH SCHOOL GERMAN.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
TIME TO BE ARRANGED.
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
LECT-DISC C 10-12 MTUWTH 334 L H

GER 103 INTERMEDIATE COURSE.
PREREQUISITE--GERMAN 102, TWO YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
LECT-DISC A 8-10 MTUWTH 113 L H

GER 104 INTERMEDIATE COURSE.
CONTINUATION OF GERMAN 103. LITERARY READING. PREREQUISITE- GERMAN 103, OR THREE YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
LECT-DISC C 10-12 MTUWTH 235 L H

COURSES FOR ADVANCED UNDERGRADUATES

GER 270 TWENTIETH CENTURY GERMAN LITERATURE.
INTRODUCTION TO TRENDS OF MODERN CIVILIZATION AS REFLECTED IN CONTEMPORARY GERMAN LITERATURE. PREREQUISITE--GER. 210 OR CONSENT OF INSTRUCTOR.
3 HOURS
LECT-DISC A 8-10 M W F 235 L H FREY

GER 291 SENIOR THESIS AND HONORS COURSE.
PREREQUISITE--SENIOR STANDING, CONSENT OF INSTRUCTOR.
2 HOURS
CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GER 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR. 382, SPAN. 382, RUSS. 382. INSTRUCTION AND PRACTICE IN THE TECHNIQUES OF MAKING FOREIGN-LANGUAGE TAPES AND INTEGRATING THEM WITH CLASSROOM ACTIVITY. INSTRUCTION IN THE PROBLEMS OF PLANNING AND OPERATING A LANGUAGE LABORATORY. PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT
LECT-DISC 10 MTUWTH 224 L H NACHTMANN

COURSES FOR GRADUATES

GER 400 BEGINNING GERMAN FOR GRADUATE STUDENTS.
THIS COURSE ASSUMES NO KNOWLEDGE OF GERMAN.
4 HOURS--NO GRADUATE CREDIT.

LECT-DISC	A	8-10	MTUWTH	335	L	H
LECT-DISC	C	10-12	MTUWTH	335	L	H
LECT-DISC	L1	7-9PM	MTUWTH	205	G	H
LECT-DISC	L2	7-9PM	MTUWTH	207	G	H

GER 401 READINGS IN GERMAN FOR GRADUATE STUDENTS.
PREREQUISITE--GERMAN 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
*SECTIONS A1 AND L1 DO READINGS PARTICULARLY IN THE HUMANITIES AND THE SOCIAL SCIENCES, SECTIONS A2, C, AND L2 IN THE NATURAL SCIENCES.

LECT-DISC	A1	8-10	M W F	305	L	H		PHILIPPSON
LECT-DISC	A2	8-10	M W F	334	L	H		
LECT-DISC	C	10-12	M W F	305	L	H		
LECT-DISC	L1	7-9PM	M WTH	217	G	H		
LECT-DISC	L2	7-9PM	M WTH	219	G	H		

GER 493 RESEARCH IN SPECIAL TOPICS.
1 TO 4 UNITS

LECT-DISC	ARR	PHILIPPSON

GER 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

GREEK

DEPARTMENT OFFICE 138 L H

MAJOR--TWENTY HOURS, EXCLUDING GREEK 150, 161, AND 318. IN ADDITION CLASSICS 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, LATIN BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

CREDIT FOR NEW TESTAMENT GREEK TRANSFERRED FROM OTHER INSTITUTIONS IS NOT COUNTED TOWARD A MAJOR OR MINOR UNTIL AFTER THE SATISFACTORY COMPLETION OF GREEK 201-202 AND THEN ONLY TO A POSSIBLE MAXIMUM OF EIGHT HOURS AS THE EQUIVALENT OF GREEK 101-102 AND THREE HOURS AS THE EQUIVALENT OF ONE SEMESTER OF GREEK 391.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GRK 391 READINGS IN GREEK LITERATURE.
READINGS FROM GREEK AUTHORS CHOSEN BY THE INSTRUCTOR CHIEFLY FROM THE FOLLOWING LIST OF AUTHORS AND TOPICS--OTHERS MAY BE CHOSEN--HERODOTUS, TRAGEDY, COMEDY, LYRIC POETRY, ARISTOTLE, ORATORY, NEW TESTAMENT, SURVEY OF GREEK LITERATURE. PREREQUISITE--TWO YEARS OF COLLEGE GREEK, CONSENT OF INSTRUCTOR. THIS COURSE MAY BE REPEATED FOR CREDIT TO A MAXIMUM OF TWELVE HOURS.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	10	M W F	124	L	H		SMITH

COURSES FOR GRADUATES

GRK 499 THESIS RESEARCH.
SAME AS LATIN 499.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
ARR SMITH. HELLER

HEALTH EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

H ED 281 FIRST AID.
2 HOURS

LECT-DISC	D	11	MTUWTH	211	HUFF GYM	BOYS

H ED 282 ORGANIZATION OF SCHOOL HEALTH PROGRAMS.
3 HOURS

LECT-DISC	A	7-9	M	207	HUFF GYM	HUFFMAN
		8	TUWTHF	207	HUFF GYM	

COURSES FOR GRADUATES

H ED 404 TRENDS AND ISSUES IN SEX EDUCATION.
PREREQUISITE--UNDERGRADUATE COURSES IN BIOLOGICAL AND SOCIAL SCIENCES OR CONSENT OF INSTRUCTOR. MAJORITY OF HOURS IN THESE COURSES MUST BE ABOVE FRESHMAN LEVEL.
1 UNIT

LECT-DISC	10	MTUWTH	207A	HUFF GYM	HUFFMAN

H ED 490 SEMINAR.
NO CREDIT

LECT-DISC	2-4	TU TH	211	HUFF GYM	HUFFMAN

H ED 499 THESIS RESEARCH.
1/2 TO 2 UNITS
ARR STAFF

HISTORY

DEPARTMENT OFFICE 325 L H

MAJOR--TWENTY HOURS IN HISTORY. INCLUDING AT LEAST TEN HOURS IN COURSES HAVING JUNIOR STANDING AS A PREREQUISITE. AND NOT INCLUDING MORE THAN FOUR HOURS IN COURSES OPEN TO FRESHMEN. THE COURSES OFFERED MUST INCLUDE AT LEAST SIX HOURS IN AMERICAN HISTORY. SIX HOURS IN MODERN EUROPEAN HISTORY SINCE 1500. AND SIX HOURS IN OTHER FIELDS OF HISTORY.

MINORS--TWENTY HOURS. NOT INCLUDING MORE THAN FOUR HOURS OPEN TO FRESHMEN. IN ONE OR TWO OF THE FOLLOWING--ANCIENT OR MODERN LANGUAGE EXCLUDING ELEMENTARY COURSES 101 AND 102. ANTHROPOLOGY. ECONOMICS. ENGLISH AND AMERICAN LITERATURE. GEOGRAPHY. LAW. LIBRARY SCIENCE. PHILOSOPHY. POLITICAL SCIENCE. AND SOCIOLOGY.
ONE OF THE CURRICULA IN LATIN AMERICAN STUDIES. RUSSIAN LANGUAGE AND AREA STUDIES. OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR. EXCLUDING THE COURSES IN HISTORY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 121 AND 122, HISTORY OF CIVILIZATION, ARE ACCEPTED AS SATISFYING THE PREREQUISITE OF A YEAR OF COLLEGE HISTORY IN ALL CASES IN WHICH IT IS REQUIRED.

HIST 112 HISTORY OF WESTERN CIVILIZATION, 1815 TO THE PRESENT.
THIS COURSE WITH HIST. 111, SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		9	MTUWTH	232	L	H	LING
QUIZ	A	10	MTUWTH	232	L	H	SHAY

HIST 151 HISTORY OF THE UNITED STATES TO 1865.
PREREQUISITE--SOPHOMORE STANDING. THIS COURSE WITH HIST. 152 SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. A STUDENT MAY NOT RECEIVE CREDIT IN BOTH HIST. 151 AND 261.
4 HOURS

LECT		9	MTUWTH	106	L	H	SPENCE
DISC	A	11	MTUWTH	232	L	H	MCCOLLEY

HIST 152 HISTORY OF THE UNITED STATES FROM 1865 TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING. THIS COURSE WITH HIST. 151 SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. A STUDENT MAY NOT RECEIVE CREDIT IN BOTH HIST. 152 AND 262.
4 HOURS

LECT		8	MTUWTH	106	L	H	GRAEBNER
DISC	A	9	MTUWTH	114	L	H	CRAWFORD
DISC	B	10	MTUWTH	329	L	H	DAVIS
DISC	C	11	MTUWTH	114	L	H	ROLEY

COURSES FOR ADVANCED UNDERGRADUATES

NOTE--JUNIOR STANDING IS REQUIRED EXCEPT WHERE NOTED.

HIST 260 COLONIAL BEGINNINGS AND THE AMERICAN REVOLUTIONARY ERA TO 1789.
FROM THE EARLIEST SETTLEMENTS TO THE ADOPTION OF THE FEDERAL CONSTITUTION. THIS COURSE WITH HIST. 261 AND 262 MEETS THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES.
3 HOURS

LECT		9	MTUWTHFS	329	L	H	DUNBAR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--JUNIOR STANDING IS REQUIRED EXCEPT WHERE NOTED.

HIST 302 THE MIDDLE AGES, 1100 TO 1500 A.D.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		10	MTUWTHFS	123	L	H	GEANAKOPLOS

HIST 305 THE AGE OF THE RENAISSANCE.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		10	MTUWTHFS	110	L	H	LING

HIST 308 THE EUROPEANIZATION OF THE NEAR EAST, 1768 TO 1914.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		9	MTUWTHFS	110	L	H	DAWN

HIST 313 EUROPEAN HISTORY FROM 1900 TO 1929.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		8	MTUWTHFS	329	L	H	SHAY

HIST 367 THE TRANS-MISSISSIPPI WEST.
THE HISTORY OF WESTERN EXPANSION SINCE THE LOUISIANA PURCHASE.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		11	MTUWTHFS	123	L H	SPENCE

HIST 371 AMERICAN INTELLECTUAL AND CULTURAL HISTORY TO 1877.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		9	MTUWTHFS	123	L H	MCCOLLEY

HIST 374 DIPLOMATIC HISTORY OF THE UNITED STATES IN THE TWENTIETH CENTURY.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		10	MTUWTHFS	106	L H	GRAEBNER

HIST 394 MODERN CHINA--CHINA SINCE 1840.
PREREQUISITE--1 YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT

LECT		11	MTUWTHFS	329	L H	CRAWFORD

COURSES FOR GRADUATES

HIST 401 SEMINAR IN MEDIEVAL HISTORY.
1 UNIT

		3-5	TU TH	232	L H	GEANAKOPLOS

HIST 458 SEMINAR IN AMERICAN HISTORY--THE REVOLUTIONARY PERIOD.
1 UNIT

		3-5	M W	329	L H	DUNBAR

HIST 495 HISTORICAL METHOD.
1 UNIT

		8	MTUWTH	123	L H	DAWN

HIST 497 READING COURSE.
DIRECTED READING IN SPECIAL FIELDS. OPEN ONLY TO STUDENTS WITH MASTERS DEGREE OR EQUIVALENT, WHO ARE PREPARING FOR THE PRELIMINARY EXAMINATION IN HISTORY AND WHO NEED INSTRUCTION IN AREAS NOT PROVIDED BY CURRENT COURSE OFFERINGS.
PREREQUISITE--MASTERS DEGREE OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

		ARR				STAFF

HIST 499 THESIS RESEARCH.
INDIVIDUAL DIRECTION IN RESEARCH AND GUIDANCE IN WRITING THESES FOR ADVANCED DEGREES.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

		ARR				STAFF

HOME ECONOMICS

DEPARTMENT OFFICE 260 B H

COURSES FOR UNDERGRADUATES

H EC 105 CHILD AND FAMILY.
4 HOURS

LECT		8	MTUWTHF	12	C D	RAPP
LAB	A	9-11	TU TH	12	C D	RAPP
LAB	B	9-11	W F	12	C D	RAPP

COURSES FOR ADVANCED UNDERGRADUATES

H EC 202 LABORATORY IN CHILD DEVELOPMENT.
PREREQUISITE--HOME ECON. 105, PSYCH. 100 OR 103.
2 HOURS
4 HOURS OF LAB ARRANGED DURING TU W TH F A.M.

LECT	2	MTUWTH	12	C D		MARTIN
LAB	ARR		219	C D		MARTIN

H EC 273 HOME MANAGEMENT.
STUDENTS RESIDE IN THE HOME MGMT. HOUSE FOR FOUR WEEKS DURING THE SEMESTER. PREREQUISITE--ECON. 102 AND 103, OR 108, HOME ECON. 105, 133, 160, 171, 183, 184, CONSENT OF INSTRUCTOR.
3 HOURS
*ADDITIONAL HOURS TO BE ARRANGED.
SECOND FOUR WEEKS--JULY 16 TO AUGUST 11.

LECT		9-11	M	154	BEV HALL	GUTHRIE
LAB	*	9-11	TUWTHF	1202	W GREEN	GUTHRIE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

H EC 326 DEMONSTRATION PROBLEMS AND TECHNIQUES.
PREREQUISITE--ONE OF THE FOLLOWING--HOME ECON. 231, 262, 270, 301, 375, 379, 380, 386, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 14.

LAB-DISC	1-5	TUWTHF	328	BEV HALL	LAMKIN

H EC 351 SPECIAL PROBLEMS ON GROUP FEEDING WITH EMPHASIS ON THE SCHOOL LUNCH.
PLANNED FOR TEACHERS IN SECONDARY SCHOOLS AND FOR HOME ADVISERS AND OTHERS INTERESTED IN COMMUNITY FEEDING PROBLEMS. LECTURES, DISCUSSIONS, AND LABORATORY PRACTICE IN QUANTITY FOOD MANAGEMENT. EMPHASIZES THE SCHOOL LUNCH PROGRAM AS AN INTEGRAL PART OF THE EDUCATIONAL SYSTEM. SPECIAL PROBLEMS IN PURCHASING, FLOOR PLANS, AND EQUIPMENT REQUIRED OF GRADUATE STUDENTS. PREREQUISITE--H. EC. 220, 231, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 14.

LAB-DISC	8-1230	MTUWTHF	292	BEV HALL	HUNZICKER HOUSE

H EC 361 DEVELOPMENT AND FUNCTION OF FAMILY HOUSING.
SAME AS AGR. ENG. 361. PREREQUISITE--H. EC. 160 AND 171, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
SECOND FOUR WEEKS--JULY 16 TO AUGUST 11.

LECT-DISC	8-11	M W F	218	AGR ENG	HANSEN
LAB	8-11	TU TH	202	AGR ENG	

H EC 375 HOME EQUIPMENT.
PREREQUISITE--HOME ECON. 171, SIX ADVANCED HOURS IN HOME ECONOMICS INCLUDING ONE OF THE FOLLOWING--H. EC. 231, 273, 380, SENIOR STANDING, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 14.

LECT	8	MTUWTHF	166	BEV HALL	HERNDON
LAB	9-11	MTUWTHF	166	BEV HALL	

H EC 380 ADVANCED TEXTILES.
THE EFFECT OF THE PHYSICAL AND CHEMICAL STRUCTURES OF TEXTILES FIBERS ON THEIR PROPERTIES, MANUFACTURING PROCESSES, USE AND CARE. PREREQUISITE--HOME EC. 183, CHEMISTRY 132.
4 HOURS, OR 1 UNIT

LECT	1	M W F	208	BEV HALL	GALBRAITH
LAB	2-5	M W F	201	BEV HALL	

H EC 388 PROBLEMS IN TEXTILES AND CLOTHING.
PREREQUISITES--HOME ECON. 286 OR 380, OR MKTG. 211, MINIMUM GRADE POINT AVERAGE OF 3.5, SENIOR STANDING IN HOME ECONOMICS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
ARR GALBRAITH

COURSES FOR GRADUATES

H EC 410 PROBLEMS IN FAMILY LIVING.
PREREQUISITE--HOME ECON. 210.
1 UNIT
DISC 1-3 TU TH 449 BEV HALL MOWRER

H EC 493 ADVANCED STUDIES IN HOME ECONOMICS.
1/2 TO 1 UNIT
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--THE CHILD AND THE FAMILY
C--FOODS
D--NUTRITION
E--TEXTILES AND CLOTHING
ARR STAFF

H EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--THE CHILD AND THE FAMILY MOWRER
C--FOODS OSMAN, VAN DUYNE
D--NUTRITION HOLMES, SMITH
E--TEXTILES AND CLOTHING GALBRAITH
ARR

HORTICULTURE

DEPARTMENT OFFICE 124 M H

COURSES FOR ADVANCED UNDERGRADUATES

HORT 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5. NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR A THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--POMOLOGY LOTT, SIMONS, TITUS, ZYCH
B--VEGETABLE CROPS ARNOLD, MCCOLLUM, THOMPSON
VANDEMARK
C--FLORICULTURE ACKERMAN, CULBERT, FOSLER,
GARTNER, KEMMERER, WEINARD
D--FRUIT BREEDING BIRKELAND, DAYTON
E--APICULTURE MILUM
CONF ARR STAFF

COURSES FOR GRADUATES

HORT 492 SPECIAL TOPICS IN HORTICULTURE.
PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
1/2 TO 2 UNITS
CONF ARR STAFF

HORT 499 THESIS RESEARCH.
REQUIRED IN MAJOR IN HORTICULTURE. PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--FLORICULTURE CULBERT, GARTNER, WEINARD
B--FRUIT BREEDING BIRKELAND, DAYTON
C--POMOLOGY LOTT, SIMONS, TITUS
D--VEGETABLE CROPS ARNOLD, MCCOLLUM, THOMPSON
ARR STAFF

HYGIENE

DEPARTMENT OFFICE DAVENPORT HOUSE

COURSES FOR ADVANCED UNDERGRADUATES

HYG 200 MENTAL HEALTH.
AN INTRODUCTION TO THE SCIENCE OF MENTAL HEALTH AND ILLNESS INCLUDING PERSONALITY DEVELOPMENT. THE GENESIS AND MANIFESTATIONS OF MENTAL ILLNESS. AND THE MAINTENANCE OF MENTAL HEALTH. IT IS TAUGHT BY A PSYCHIATRIST WITH SPECIAL EMPHASIS ON THE PREVENTIVE AND MEDICAL ASPECTS OF MENTAL HEALTH.
2 HOURS

LECT-DISC	A	11	M TH	393	BEV HALL	LITTLE. KIERSCH

HYG 206 SEX EDUCATION AND FAMILY LIFE.
OFFERED TO PERSONS WHO ARE INTERESTED IN BECOMING MORE CRITICAL AND OBTAINING A LARGER PERSPECTIVE TO HELP THEIR UNDERSTANDING OF THE PROBLEMS OF SEX AND FAMILY LIFE. PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

LECT-DISC	A	9	M TH	393	BEV HALL	TEIGLER

INDUSTRIAL EDUCATION

DEPARTMENT OFFICE 332 G H

COURSES FOR UNDERGRADUATES

I ED 189 INDUSTRIAL PRACTICES.
OPEN ONLY TO STUDENTS ENROLLED IN INDUSTRIAL EDUCATION OPTIONS II AND III. APPLICATIONS FOR JOB ASSIGNMENTS MUST BE MADE THREE MONTHS PRIOR TO THE SEMESTER PLACEMENT IS DESIRED. REPEATED ENROLLMENT IS PERMITTED TO A MAXIMUM OF SEVENTEEN HOURS. PREREQUISITE--SOPHOMORE STANDING.
2 OR 3 HOURS

	ARR				ZIEL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

I ED 383 DEVELOPMENT. ORGANIZATION. AND PRINCIPLES OF INDUSTRIAL EDUCATION.
SAME AS ED. 383.
3 HOURS. OR 1/2 TO 1 UNIT

LECT		1	TUWTHF	321 G H	LUX
LAB		ARR			

I ED 384 THE GENERAL SHOP PROGRAM.
SAME AS ED. 384. PREREQUISITE--SIXTEEN HOURS IN INDUSTRIAL EDUCATION.
4 HOURS. OR 1 UNIT

LAB		2-5	TUWTHF	5 WOODSHOP	ZIEL

ITALIAN

DEPARTMENT OFFICE 218 L H

MAJOR--TWENTY HOURS IN ITALIAN, EXCLUDING ITALIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. HISTORY 217, LINGUISTICS 300 AND ITALIAN 291 AND 292 ARE ACCEPTABLE. ITALIAN 291 AND 292 FOR MAJORS CAN BE ARRANGED FOR ADVANCED GROUP CREDIT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--
EDUCATION, ENGLISH, EXCLUDING RHET. 101 AND 102, FRENCH, GERMAN, GREEK, HISTORY, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR GRADUATES

ITAL 491 SPECIAL TOPICS IN ITALIAN.
1/2 TO 1 UNIT
ARR STAFF

ITAL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR SHOEMAKER

JOURNALISM

DEPARTMENT OFFICE 115 G H

COURSES FOR ADVANCED UNDERGRADUATES

JOURN 291 SPECIAL PROBLEMS.
SPECIAL PROJECTS, RESEARCH AND INDEPENDENT READING IN JOURNALISM FOR STUDENTS CAPABLE OF INDIVIDUAL WORK UNDER THE GUIDANCE OF A FACULTY ADVISER. PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 TO 3 HOURS
CONF ARR REIDY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

JOURN 308 HIGH SCHOOL JOURNALISM.
JOURNALISTIC WRITING IN THE HIGH SCHOOL, NEWSPAPER STUDY AND TRAINING OF NEWSPAPER READERS, SUPERVISION OF SCHOOL PUBLICATIONS AND PUBLICITY, JUNIOR COLLEGE COURSES IN JOURNALISM. PREREQUISITE--ED. 201 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	C	10	MTUWTHF	113	G H	REIDY
	C	3	M	113	G H	REIDY

COURSES FOR GRADUATES

JOURN 474 GOVERNMENT AND MASS COMMUNICATIONS.
SAME AS COMM. 474.
1 UNIT
LECT-DISC 10-12 TU TH 123 G H JENSEN

JOURN 490 SPECIAL TOPICS IN JOURNALISM.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 TO 1 UNIT
CONF ARR JENSEN

JOURN 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN JOURNALISM.
1 TO 2 UNITS
CONF ARR JENSEN

LABOR AND INDUSTRIAL RELATIONS

DEPARTMENT OFFICE 704 S SIXTH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

L I R 312 HUMAN RELATIONS IN BUSINESS.
SAME AS MGMT. 312. PREREQUISITE--MGMT. 101 OR EQUIVALENT.
3 HOURS. OR 1/2 TO 3/4 UNIT
LECT-DISC 11 MTUWTHFS 420 D K H DAUTEN

COURSES FOR GRADUATES

L I R 440 LABOR ECONOMICS.
SAME AS ECON. 440. PREREQUISITE--A MINIMUM OF SIX HOURS IN ECONOMICS.
1 UNIT
LECT-DISC 8-10 M TH 119 D K H MCNATT

L I R 442 COLLECTIVE BARGAINING.
SAME AS ECON. 442. PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 10-12 TU F ILIR CONF ROOM STAFF

L I R 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS MGMT. 448. PREREQUISITE--MGMT. 248 OR EQUIVALENT OR CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 8-10 TU F 420 D K H HECKMANN

L I R 490 INDIVIDUAL TOPICS IN LABOR AND INDUSTRIAL RELATIONS.
THE TOPIC SELECTED BY THE STUDENT AND THE PROPOSED PLAN OF STUDY MUST BE APPROVED BY THE ADVISER AND THE STAFF MEMBER WHO WILL SUPERVISE THE WORK.
1 UNIT
CONF ARR STAFF

L I R 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

LATIN

DEPARTMENT OFFICE 138 L H

MAJOR--TWENTY HOURS, EXCLUDING LATIN 101, 102, 103, AND 162, AND INCLUDING SIX HOURS IN TRANSLATION COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES. IN ADDITION, CLASSICS 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE. IN ADDITION TO THESE TWENTY HOURS IN THE LANGUAGE, STUDENTS WHOSE MAJOR IS LATIN AND WHO PLAN TO TEACH THE SUBJECT ARE ALSO REQUIRED TO TAKE CLASSICS 101, LATIN 162, AND A THREE-HOUR COURSE IN THE HISTORY OF THE ROMAN REPUBLIC. SEE HIST. 383.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, GREEK BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LAT 391 READINGS IN LATIN LITERATURE.
READINGS FROM LATIN AUTHORS CHOSEN BY THE INSTRUCTOR CHIEFLY FROM THE FOLLOWING LIST OF AUTHORS AND TOPICS--OTHERS MAY BE CHOSEN--LIVY, HORACE, VERGIL, CICEROS ORATIONS, SENECA, OVID, CICEROS ESSAYS, PATRISTIC LATIN, MEDIEVAL LATIN. PREREQUISITE--THREE YEARS OF COLLEGE LATIN OR EQUIVALENT, CONSENT OF INSTRUCTOR. THIS COURSE MAY BE REPEATED FOR CREDIT TO A MAXIMUM OF TWELVE HOURS.
3 HOURS, OR 1/2 TO 1 UNIT
LECT-DISC 9 M W F 124 L H HELLER

COURSES FOR GRADUATES

LAT 409 HISTORY OF THE LATIN LANGUAGE.
PREREQUISITE--TWO YEARS OF COLLEGE LATIN OR EQUIVALENT, TWO YEARS OF A MODERN FOREIGN LANGUAGE.
1 UNIT
11-1230 M W F 124 L H HELLER

LAT 499 THESIS RESEARCH.
SAME AS GREEK 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR HELLER

LATIN-AMERICAN STUDIES PROGRAM

SEE SOCIAL SCIENCES

LAW

DEPARTMENT OFFICE 209 LAW

COURSES FOR FIRST-YEAR LAW STUDENTS

LAW 302 CONTRACTS B.
3 HOURS, OR 1 UNIT
PATTERSON, GOBLE & JONES, CASES ON CONTRACTS, 4TH ED.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
LECT-DISC A 10-12 MTU E LAW STONE
11 WTH E LAW

LAW 304 TORTS B.
3 HOURS, OR 1 UNIT
GREGORY & KALVEN, CASES ON TORTS.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.

LECT-DISC	A	8	WTH	E LAW	LAFAVE
		8-10	FS	E LAW	

COURSES FOR ADVANCED LAW STUDENTS

LAW 331 LEGISLATION.
3 HOURS, OR 1 UNIT
CASEBOOK TO BE ANNOUNCED.

LECT-DISC	A	10	WTH	A LAW	RUUD
		10-12	FS	A LAW	

LAW 337 COMMERCIAL LAW, II.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	10	MTU	A LAW	HAWKLAND

LAW 344 CREDITORS RIGHTS.
3 HOURS, OR 1 UNIT
HANNA & MCLACHLAN, CASES ON CREDITORS RIGHTS, 5TH ED., AND HANNA & MCLACHLAN, BANKRUPTCY ACT OF 1898 AS AMENDED WITH ANNOTATIONS, 6TH ED.

LECT-DISC	A	11	MTUWTH	A LAW	HAWKLAND

LAW 346 FUTURE INTERESTS.
3 HOURS, OR 1 UNIT
SIMES, CASES ON THE LAW OF FUTURE INTERESTS, 2D ED. 1951.

LECT-DISC	A	8	WTH	A LAW	CRIBBET
		8-10	FS	A LAW	

LAW 357 LEGAL ACCOUNTING.
2 HOURS
CASEBOOK TO BE ANNOUNCED.

LECT-DISC	A	2-4	M	E LAW	YOUNG
		2	TUW	E LAW	

LAW 361 PROBLEMS AND PROCEDURES IN OFFICE PRACTICE.
A PRACTICAL COURSE IN PREPARATION FOR NEGOTIATIONS, OFFICE CONFERENCES, AND SETTLEMENT PROCEDURES, WITH EMPHASIS ON PARTICULAR AREAS OF PRACTICE.
1 HOUR

LAB	A	3	THF	E LAW	CLEARY

LAW 362 PRACTICE COURT.
PRACTICE WORK IN THE CONDUCT OF LITIGATION IN THE TRIAL COURT.
2 HOURS

LAB	A	1-3	THF	COURTROOM LAW	CLEARY

LAW 365 FEDERAL TAX PROBLEMS.
SELECTED INCOME, ESTATE, AND GIFT TAX PROBLEMS ENCOUNTERED IN THE GENERAL PRACTICE INVOLVING BOTH SUBSTANTIVE AND PROCEDURAL QUESTIONS.
1 HOUR

LECT-DISC	A	3	TUW	E LAW	YOUNG

LAW 399 RESEARCH IN SPECIAL TOPICS.
INDIVIDUAL RESEARCH ON A SPECIAL PROBLEM SELECTED IN CONSULTATION WITH THE INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 TO 1 UNIT

CONF	A	ARR			STAFF

COURSES FOR GRADUATES

LAW 499 THESIS RESEARCH.
1/2 TO 2 UNITS

CONF	A	ARR			STAFF

LIBRARY SCIENCE

DEPARTMENT OFFICE 331 LIB

FOR ALL STUDENTS

COLLOQUIUM--TALKS AND DISCUSSIONS BY PROMINENT LIBRARIANS AND OTHER LEADERS ASSOCIATED WITH LIBRARY INTERESTS, OR WITH THE PRODUCTION AND DISTRIBUTION OF BOOKS AND COMPARABLE MEDIA. ALL STUDENTS ARE REQUIRED TO ATTEND.
NO CREDIT

COURSES FOR ADVANCED UNDERGRADUATES

LIB S 201 USE OF BOOKS AND LIBRARIES.
A BASIC COURSE ON THE MOST COMMONLY USED REFERENCE SOURCES, STRESSING THE STUDY OF THE VARIOUS TYPES OF REFERENCE TOOLS, E.G. DICTIONARIES, ENCYCLOPEDIAS, PRINTED INDEXES, BIOGRAPHICAL DICTIONARIES, YEARBOOKS, DIRECTORIES, AND HANDBOOKS. METHODS OF STUDYING SUCH MATERIALS AND MATTERS OF BIBLIOGRAPHICAL FORM ALSO ARE EMPHASIZED, IN ORDER TO LAY A FOUNDATION FOR SUCCEEDING COURSES IN THE FIELD.
3 HOURS

LECT-DISC		9	MTUWTHFS	118 LIB	ERLANDSON

LIB S 204 DEVELOPMENT AND OPERATION OF LIBRARIES.
SEEKS TO INTRODUCE THE STUDENT TO THE DEVELOPMENT OF THE LIBRARY AS AN INSTITUTION, THE CONCEPT OF A PHILOSOPHY OF LIBRARIANSHIP, AND THE GENERAL OPERATION OF LIBRARIES.
3 HOURS OR 2 HOURS IN SUMMER.

LECT-DISC		1	MTU THF	118 LIB	HARRISON

LIB S 255 ORGANIZATION AND OPERATION OF LIBRARIES.
DESIGNED TO PROVIDE AN INTRODUCTION TO CATALOGING AND CLASSIFICATION AS PRACTICED IN MODERN LIBRARIES. PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	314 LIB	PAGE
LECT-DISC	B	10	MTUWTHFS	314 LIB	PAGE

LIB S 258 SELECTION OF LIBRARY MATERIALS.
THE PHILOSOPHY AND PRACTICE OF BUILDING THE LIBRARY COLLECTION. ATTEMPTS TO DEVELOP FAMILIARITY WITH BOOK TRADE CHANNELS, ESPECIALLY THOSE IN THE UNITED STATES, AND TO ACQUAINT STUDENTS WITH THE AIDS USEFUL IN SELECTING AND ACQUIRING BOOKS, PERIODICALS, DOCUMENTS AND OTHER PRINT AND NON-PRINT MATERIALS.
3 HOURS, OR 2 HOURS IN SUMMER

LECT-DISC		11	MTU THF	314 LIB	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LIB S 302 LITERATURE OF SCIENCE AND TECHNOLOGY.
AN INTRODUCTION TO THE SCOPE AND SIGNIFICANT CHARACTERISTICS OF THE LITERATURE OF SCIENCE, TO MODERN CONCEPTS AND REPRESENTATIVE LITERARY WORKS IN EACH OF THE MAJOR FIELDS OF PURE AND APPLIED SCIENCE. DESIGNED TO GIVE AN INSIGHT INTO THE CONTENT OF THE SCIENTIFIC DISCIPLINES AND OF THEIR ROLE IN MODERN SOCIETY. SELECTED READINGS AND FILMS ACQUAINT STUDENTS WITH REPRESENTATIVE MATERIAL IN THE FIELD.
3 HOURS, OR 1 UNIT

LECT-DISC		8-10	TU F	428 LIB	ANDREWS

LIB S 303 LIBRARY MATERIALS FOR CHILDREN.
THE SELECTION AND USE OF LIBRARY MATERIALS FOR CHILDREN IN PUBLIC AND SCHOOL LIBRARIES, ACCORDING TO THE NEEDS OF THE CHILD IN HIS PHYSICAL, MENTAL, SOCIAL, AND EMOTIONAL DEVELOPMENT AND THE PURPOSES OF THE ELEMENTARY SCHOOL PROGRAM. THE STUDENT BECOMES ACQUAINTED WITH THE STANDARD BOOK SELECTION AIDS FOR CHILDREN AND WITH ALL TYPES OF PRINTED AND AUDIO-VISUAL MATERIALS, AND DEVELOPS THE ABILITY TO SELECT AND DESCRIBE CHILDRENS LIBRARY MATERIALS ACCORDING TO THEIR DEVELOPMENTAL USES.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	1-3	M W F	314	LIB	THOMASSEN

LIB S 304 LIBRARY MATERIALS FOR ADOLESCENTS.
THE SELECTION AND USE OF LIBRARY MATERIALS FOR THE YOUNG ADULT IN SCHOOL AND PUBLIC LIBRARIES AND COMMUNITY ORGANIZATIONS. THE COURSE AIMS TO DEVELOP THE ABILITY TO SELECT AND EVALUATE A WIDE VARIETY OF READING MATERIALS FROM STANDARD BIBLIOGRAPHIES FOR THE ADOLESCENT ACCORDING TO HIS PERSONAL AND SCHOOL NEEDS.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	9-11	M W F	309	LIB	THOMASSEN

LIB S 308 AUDIO-VISUAL SERVICES IN LIBRARIES.
CONSIDERS THE DEVELOPMENT OF AUDIO-VISUAL WORK IN LIBRARIES. STUDENTS BECOME AWARE OF THE RANGE, TYPES, AND FUNCTIONS OF THE AUDIO-VISUAL MATERIALS, EQUIPMENT, AND SERVICES COMMONLY PROVIDED, AND OF SOME ORGANIZATIONAL AND TECHNICAL PROBLEMS MET BY SPECIALISTS IN THE FIELD. LABORATORY SESSIONS AFFORD PRACTICAL EXPERIENCE IN WORKING WITH MANY TYPES OF MATERIALS AND EQUIPMENT, INCLUDING RADIO AND TELEVISION.
3 HOURS, OR 1 UNIT

LECT-DISC	3-5	M W F	314	LIB	GOLDSTEIN

COURSES FOR GRADUATES

LIB S 402 STUDIES IN READING.
DESIGNED TO ACQUAINT STUDENTS WITH THE MAJOR AREAS OF INVESTIGATION AND INTEREST IN READING. SPECIAL ATTENTION IS GIVEN TO STUDIES OF READING INTERESTS AND HABITS OF CHILDREN, YOUTH, AND ADULTS. CLASS DISCUSSIONS ARE DEVOTED TO ANALYSIS OF VARIOUS STUDIES AND THEIR IMPLICATIONS FOR LIBRARY SERVICE AND CLASSROOM TEACHING.
1 UNIT

LECT-DISC	1-3	M TH	428	LIB	LADLEY

LIB S 405 LIBRARY ADMINISTRATION.
DESIGNED TO SUPPLY KNOWLEDGE OF THE INTERNAL ORGANIZATION OF LIBRARIES AND OF THE PRINCIPLES OF LIBRARY ADMINISTRATION. EMPHASIS IS ON COMPARISON OF THE CONDITIONS FOUND IN THE SEVERAL KINDS OF LIBRARIES AND ON APPLICATIONS OF THE GENERAL THEORY OF ADMINISTRATION.
1 UNIT

LECT-DISC	3-5	M TH	118	LIB	HARRISON

LIB S 406 LIBRARY SERVICE TO CHILDREN AND YOUNG PEOPLE.
THE ROLE, PROBLEMS, AND NEEDS OF LIBRARY SERVICE IN THE ELEMENTARY AND SECONDARY SCHOOL FIELDS, AND OF LIBRARY WORK WITH CHILDREN AND YOUNG PEOPLE IN THE PUBLIC LIBRARY.
1 UNIT

LECT-DISC	1-3	TU F	428	LIB	LADLEY

LIB S 407 CATALOGING AND CLASSIFICATION, I.
THE THEORY, PRACTICE, AND APPLICATION OF THE PRINCIPLES OF CATALOGING AND CLASSIFICATION. EMPHASIZES SUBJECT CATALOGING AND COMPLEX TYPES OF ENTRY. PROBLEMS PROVIDE EXPERIENCE WITH THE DECIMAL CLASSIFICATION AND LIBRARY OF CONGRESS CLASSIFICATION AND THE LIBRARY OF CONGRESS SUBJECT HEADINGS.
1 UNIT

LECT-DISC	9	MTUWTHFS	314	LIB	SMITH

LIB S 408 CATALOGING AND CLASSIFICATION, II.
THE THEORY, PRACTICE, AND APPLICATION OF THE PRINCIPLES OF CATALOGING AND CLASSIFICATION. TAKES UP THE CATALOGING AND CLASSIFICATION OF SPECIAL TYPES OF MATERIALS, INCLUDING MAPS, MUSIC, FILMS, SLIDES, PHONOGRAPH RECORDS, AND INCUNABULA AND OTHER RARE ITEMS. INCLUDES SOME DISCUSSION OF THE ADMINISTRATIVE PROBLEMS OF A CATALOGING DEPARTMENT. PREREQUISITE--LIB.S. 407.
1 UNIT

LECT-DISC	3-5	TU F	428	LIB	SMITH

LIB S 410 ADULT EDUCATION.
REVIEWS THE LITERATURE, HISTORY, AND PRESENT SCOPE OF ADULT EDUCATION IN THE UNITED STATES. INTRODUCES VARIOUS PATTERNS OF COMMUNITY ORGANIZATION FOR ADULT EDUCATION AND IDENTIFIES SIGNIFICANT EDUCATIONAL PROGRAMS CONDUCTED BY LIBRARIES. STUDENTS BECOME FAMILIAR WITH ADULT EDUCATION METHODS, TECHNIQUES, AND MATERIALS USED IN MANY TYPES OF ADULT EDUCATION PROGRAMS.
1 UNIT

LECT-DISC	8-10	M TH	428	LIB	GOLDSTEIN

LIB S 412 BIBLIOGRAPHY OF SCIENCE AND TECHNOLOGY.
STUDY OF REPRESENTATIVE REFERENCE SOURCES IN PURE AND APPLIED SCIENCE. DESIGNED TO ACQUAINT THE STUDENT WITH TYPICAL PROBLEMS ENCOUNTERED IN PROVIDING AND SERVICING SCIENTIFIC REFERENCE MATERIALS.
1 UNIT

LECT-DISC	11	MTU THF	118	LIB	ANDREWS
LECT-DISC	10-12	W	118	LIB	ANDREWS

LIB S 424 GOVERNMENT PUBLICATIONS.
THE NATURE AND SCOPE OF AMERICAN AND BRITISH GOVERNMENT PUBLICATIONS, PROBLEMS OF ORGANIZATION ARISING FROM THEIR FORM AND FROM THE METHODS OF THEIR PRODUCTION AND DISTRIBUTION.
1 UNIT

LECT-DISC	8-10	TU F	1	G H	

LIB S 430 ADVANCED BIBLIOGRAPHY.
DESIGNED TO ENABLE THE STUDENT TO UTILIZE THE VARIED RESOURCES OF A LARGE RESEARCH LIBRARY. DEALS WITH THE METHOD OF ANALYZING AND SOLVING BIBLIOGRAPHIC PROBLEMS SUCH AS ARISE IN SCHOLARLY LIBRARIES AND IN CONNECTION WITH RESEARCH PROJECTS. PREREQUISITE--LIB.S. 424 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	3-5	M TH	428	LIB	ERLANDSON

COURSES FOR ADVANCED GRADUATES

LIB S 450 ADVANCED STUDIES IN LIBRARIANSHIP.
DIRECTED AND SUPERVISED DETAILED INVESTIGATION OF SELECTED PROBLEMS. WORK MAY BE TAKEN IN THE FOLLOWING FIELDS FOR A MAXIMUM OF TWO UNITS IN EACH--REFERENCE SERVICE, CATALOGING AND CLASSIFICATION, READING.
1 TO 4 UNITS

CONF	ARR	STAFF

LIB S 499 THESIS RESEARCH.
INDIVIDUAL STUDY AND RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

LINGUISTICS

DEPARTMENT OFFICE 300 ENGLISH

A GRADUATE PROGRAM LEADING TO THE DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY IN LINGUISTICS IS OFFERED BY THE DIVISION OF SOCIAL SCIENCES. THE FOLLOWING FIELDS OF LINGUISTICS ARE AVAILABLE FOR CONCENTRATION--DESCRIPTIVE LINGUISTICS, HISTORICAL LINGUISTICS, PSYCHOLINGUISTICS, ETHNOLINGUISTICS, AND EXPERIMENTAL PHONETICS.

UNDERGRADUATE PREPARATION FOR THE STUDY OF LINGUISTICS SHOULD INCLUDE A BROAD BACKGROUND IN THE LIBERAL ARTS AND SCIENCES. STUDENTS APPLYING FOR ADMISSION MUST HAVE AT LEAST A 3.5 GRADE POINT AVERAGE FOR THAT PORTION OF THE WORK WHICH REPRESENTS THE LAST SIXTY HOURS EARNED TOWARDS THE BACHELORS DEGREE, EXCLUSIVE OF REQUIRED PHYSICAL EDUCATION AND MILITARY TRAINING.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LING 300 INTRODUCTION TO LINGUISTICS.
SAME AS COMM. 300. AN INTRODUCTION TO THE SCIENCE OF DESCRIPTIVE LINGUISTICS. PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS, OR 1/2 TO 1 UNIT
*ONE HOUR TO BE ARRANGED

*9	MTUWTHF	108	L H		LEES

LING 301 INTRODUCTION TO PHONETICS.
SAME AS SPEECH 301. BASIC PRINCIPLES OF PHONETIC STUDY, INCLUDING OBSERVATION AND REPRESENTATION OF PRONUNCIATION, EAR TRAINING, PRACTICE IN TRANSCRIPTION. PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 TO 1 UNIT
*ONE HOUR TO BE ARRANGED.

10	MTUWTH	136	L H		WOOLLEY
3	TU TH	221	G H		

LING 387 THE STRUCTURE OF ENGLISH.
SAME AS ENGL. 387. A CONSIDERATION OF THE ROLE OF LINGUISTICS IN WRITING AND EVALUATING GRAMMARS, DETAILED TREATMENT OF A GENERATIVE GRAMMAR OF ENGLISH.
3 HOURS, OR 3/4 UNIT
*1 HOUR TO BE ARRANGED

*10	MTUWTHF	105	L H		LEES

COURSES FOR GRADUATES

LING 490 SPECIAL TOPICS IN LINGUISTICS.
INDIVIDUAL STUDIES IN THE AREAS OF LINGUISTICS NOT COVERED BY THE REGULAR COURSE OFFERINGS.
1/2 TO 2 UNITS

ARR					LEES

LING 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

ARR					STAFF

MANAGEMENT

DEPARTMENT OFFICE 317B D K H

COURSES FOR UNDERGRADUATES

MGMT 101 INDUSTRIAL ORGANIZATION AND MANAGEMENT.
PREREQUISITE--ECON. 102 OR CONSENT OF INSTRUCTOR. FORTY-FIVE CREDIT HOURS. STUDENTS ARE NOT GIVEN CREDIT TOWARD GRADUATION FOR BOTH MGMT. 101 AND I.E. 237.
3 HOURS

LECT-DISC	B	9	MTUWTHFS	21	D K H	COFFEY

COURSES FOR ADVANCED UNDERGRADUATES

MGMT 245 OFFICE MANAGEMENT.
AN INTRODUCTORY COURSE IN THE TECHNIQUES OF OFFICE MANAGEMENT WHICH DEALS WITH THE ORGANIZATION ELEMENT, THE HUMAN ELEMENT, THE PHYSICAL ELEMENT, THE OPERATION ELEMENT, AND THE CONTROL ELEMENT.
PREREQUISITE--ACCY 105, ECON. 103.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	307	D K H	DAUTEN

MGMT 248 PERSONNEL ADMINISTRATION.
A STUDY OF THE FOUNDATIONS, FUNCTIONS, AND OBJECTIVES OF PERSONNEL ADMINISTRATION--HISTORY, CONTRIBUTIONS OF VARIOUS DISCIPLINES, COMPANY AND UNION ATTITUDES, ORGANIZATIONAL ASPECTS, POLICIES AND PROCEDURES--UNION-MANAGEMENT RELATIONSHIPS, RECORDS AND REPORTS, PERSONNEL RESEARCH. PREREQUISITE--ECON. 102 OR 108.
3 HOURS

LECT-DISC	B	9	MTUWTHF	307	D K H	BARNES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MGMT 301 MANAGEMENT IN MANUFACTURING.
PREREQUISITE--MGMT. 101.
3 HOURS, OR 1/2 UNIT

LECT-DISC	C	10	MTUWTHFS	307	D K H	SHAFFER

MGMT 312 HUMAN RELATIONS IN BUSINESS.
SAME AS L I R 312. PREREQUISITE--MGMT. 101 OR EQUIVALENT.
3 HOURS, OR 1/2 TO 3/4 UNIT

LECT-DISC	D	11	MTUWTHFS	420	D K H	DAUTEN

COURSES FOR GRADUATES

MGMT 401 SCIENTIFIC MANAGEMENT-QUALITATIVE.
A STUDY OF MODERN MANAGEMENT PRINCIPLES, FUNCTION, PROCESSES, AND ACTIVITIES, WITH MAJOR EMPHASIS UPON DEVELOPING A SCIENTIFIC BODY OF ADMINISTRATIVE KNOWLEDGE.
1 UNIT

LECT-DISC	E	1-3	TU F	420	D K H	ZIEGLER

MGMT 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS L I R 448. PREREQUISITE--MGMT. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	8-10	TU F	420	D K H	HECKMANN

MGMT 499 THESIS RESEARCH.
1 UNIT

CONF		ARR				ZIEGLER

MARKETING

DEPARTMENT OFFICE 411 D K H

COURSES FOR UNDERGRADUATES

MKTG 101 PRINCIPLES OF MARKETING.
PREREQUISITE--ECON. 102 OR 108, AND FORTY-FIVE CREDIT HOURS. CREDIT IS NOT GIVEN IN BOTH MKTG. 101 AND 272.
3 HOURS

LECT-DISC	D	11	MTUWTHF	305	D K H	MITCHELL
LECT-DISC	D	3	TU	305	D K H	MITCHELL

COURSES FOR ADVANCED UNDERGRADUATES

MKTG 211 PRINCIPLES OF RETAILING.
PREREQUISITE--MKTG. 101.
3 HOURS

LECT-DISC	B	9	MTUWTHF	305	D K H	MITCHELL
LECT-DISC	B	3	M	305	D K H	MITCHELL

MKTG 271 SALESMANSHIP.
PREREQUISITE--MKTG. 101. OR AGR. ECON. 230. CREDIT IS NOT GIVEN IN BOTH MKTG. 271 AND 272.
2 HOURS

DISC	A	8	MTUWTH	306	D K H	BEACH

MKTG 281 INTRODUCTION TO ADVERTISING.
SAME AS ADV. 281. PREREQUISITE--JUNIOR STANDING.
3 HOURS

LECT-DISC	C	10	MTUWTHF	306	D K H	DEBOER
LECT-DISC	C	4	M	306	D K H	DEBOER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MKTG 305 CONTEMPORARY PROBLEMS IN MARKETING MANAGEMENT.
PREREQUISITE--MKTG. 101. SENIOR STANDING.
3 HOURS. OR 1/2 UNIT

LECT-DISC	D	11	MTUWTHF	306	D K H	DEBOER
LECT-DISC	D	4	TU	306	D K H	DEBOER

MKTG 331 GRAIN MARKETING.
SAME AS AGR. ECON. 331. PREREQUISITE--AGR. ECON. 230 OR MKTG. 101.
FIELD TRIPS ESTIMATED EXPENSE $10.
3 HOURS. OR 1/2 UNIT

LECT-DISC		8-10	MTUWTH	316S	M H	HIERONYMUS

MKTG 373 SALES MANAGEMENT.
PREREQUISITE--MKTG. 101 OR 272.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	B	9	MTUWTHF	306	D K H	BEACH
LECT-DISC	B	3	M	306	D K H	BEACH

COURSES FOR GRADUATES

MKTG 472 SALES CAMPAIGNS.
1 UNIT

LECT-DISC	ARR	BEACH

MKTG 493 RESEARCH IN SPECIAL FIELDS.
1/4 TO 2 UNITS

CONF	ARR	DEBOER

MKTG 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
*CLASS MEETS ON ALTERNATE MONDAYS.

DISC	ARR	MITCHELL

DEPARTMENT OFFICE 273 A H

MAJOR IN MATHEMATICS

MAJOR--TWENTY HOURS IN MATHEMATICS, EXCLUDING COURSES WITH NUMBERS LESS THAN 130, AND INCLUDING TWO COURSES CHOSEN FROM MATH. 317, 318, 327, 328, 332, 333, 347, 348, 353, 354.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ACCOUNTANCY, ASTRONOMY, CHEMISTRY, ECONOMICS, FINANCE, PHILOSOPHY, PHYSICS, PSYCHOLOGY, STATISTICS--MATH. 161, 361, 362, 363, 364, 375, SURVEYING, THEORETIC AND APPLIED MECHANICS.
DEPARTMENTAL HONORS. ENTERING STUDENTS WITH SUPERIOR MATHEMATICAL ABILITY SHOULD APPLY TO THE DEPARTMENT OF MATHEMATICS, 273 ALTGELD HALL. FOR INFORMATION REGARDING THE HONORS COURSE, MATH. 149. INFORMATION REGARDING REQUIREMENTS FOR GRADUATION WITH DISTINCTION IN MATHEMATICS IS AVAILABLE FROM DR. J. W. PETERS, 269 ALTGELD HALL.

NOTE--AN ENTERING STUDENT WITH AN ADEQUATE PREPARATION IN HIGH SCHOOL MATHEMATICS SHOULD ENROLL IN ANALYTIC GEOMETRY, MATH. 122 OR 123, DURING THE FIRST SEMESTER, AND IN THE CALCULUS, MATH. 132 OR 133, DURING THE SECOND SEMESTER OF HIS FRESHMAN YEAR. ADMISSION TO ANALYTIC GEOMETRY NORMALLY REQUIRES A PASSING GRADE ON THE MATHEMATICS PLACEMENT TEST. A STUDENT INELIGIBLE FOR ANALYTIC GEOMETRY SHOULD ENROLL IN ALGEBRA, MATH. 111 OR 112, AND TRIGONOMETRY, MATH. 114, DURING HIS FIRST SEMESTER.

UNDERGRADUATE STUDENTS INTENDING TO TAKE ADVANCED WORK OR A MAJOR IN MATHEMATICS SHOULD COMPLETE THE SECOND SEMESTER OF THE CALCULUS, MATH. 142 OR 143, AS EARLY AS POSSIBLE. OF THE VARIOUS COURSES OFFERED AT THE 300 LEVEL, THE INTRODUCTORY COURSES IN ALGEBRA, 317, 318, IN GEOMETRY, 327, 328, IN TOPOLOGY, 332, 333, AND IN ANALYSIS, 347, 348 ARE BASIC FOR MORE ADVANCED WORK IN MATHEMATICS. MANY OF THE OTHER 300 LEVEL COURSES ARE DESIGNED TO SERVE STUDENTS WHO ANTICIPATE A RELATIVELY EARLY TERMINATION OF THEIR COURSE WORK IN MATHEMATICS. THESE STUDENTS MIGHT PREFER THE COURSES THAT RELATE INTERMEDIATE MATHEMATICS TO THEIR SPECIALIZED AREAS OF INTEREST. STUDENTS PREPARING TO TEACH HIGH SCHOOL OR COLLEGE MATHEMATICS, OR THOSE INTERESTED IN MATHEMATICS AS A CAREER SHOULD CONSULT WITH DR. J. W. PETERS, 269 ALTGELD HALL, CONCERNING THEIR PROGRAM AT THE EARLIEST POSSIBLE MOMENT AFTER ENTERING THE UNIVERSITY.

MAJOR IN STATISTICS

MAJOR--TWELVE HOURS BEYOND CALCULUS INCLUDING MATH. 315, 347, 363, AND THREE OTHER HOURS OF 300 COURSES IN STATISTICS IN THE DEPARTMENT OF MATHEMATICS.

MINORS--TWENTY HOURS IN ONE SUBJECT APPROVED BY THE DEPARTMENT OF MATHEMATICS. OF THESE TWENTY HOURS NOT MORE THAN NINE MAY BE IN STATISTICAL METHODS, AND MATH. 161 MAY BE TAKEN AS THREE OF THESE HOURS. THE COURSES NOT EMPHASIZING STATISTICAL METHODS SHOULD BE CHOSEN SO THAT COURSES ON THE 400 LEVEL CAN BE TAKEN IF THE STUDENT ENTERS GRADUATE COLLEGE.

MAJOR IN ACTUARIAL SCIENCE

MAJOR--ONE YEAR OF CALCULUS AND AT LEAST FIVE COURSES CHOSEN FROM THE FOLLOWING--MATH. 295, 311, 312, 362, 363, 371, 372,

MINORS--TWENTY HOURS CHOSEN FROM THE FOLLOWING--FIN. 259, 260, 262, 263, 360, 363, 366, 367.

NOTE--STUDENTS ARE URGED TO ELECT ACCY. 201 AND B. LAW 261 IN THEIR JUNIOR YEAR.

COURSES FOR UNDERGRADUATES

MATH 111 ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1 UNIT, PLANE GEOMETRY, 1 UNIT.
STUDENTS HAVING 1-1/2 OR MORE UNITS OF HIGH SCHOOL ALGEBRA MAY NOT TAKE THIS COURSE UNLESS THEY HAVE THE APPROVAL OF THEIR COLLEGE OFFICE
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT-DISC	B1	9-11	MTUWTHF	159	A	H

MATH 112 COLLEGE ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, PLANE GEOMETRY, 1 UNIT.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	C1	10	MTUWTHFS	102	A	H

MATH 114 PLANE TRIGONOMETRY.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, OR REGISTRATION IN MATH 111, PLANE GEOMETRY, 1 UNIT.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

LECT-DISC	D1	11	TUWTHF	102	A	H

MATH 123 ANALYTIC GEOMETRY.
PLANE AND SOLID ANALYTIC GEOMETRY. PREREQUISITE--MATH. 111 OR 112, AND 114.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT-DISC	A1	8-10	MTUWTHF	108	A	H
LECT-DISC	C1	10-12	MTUWTHF	108	A	H

MATH 133 CALCULUS.
FIRST COURSE FOR STUDENTS OF MATHEMATICS AND ENGINEERING.
PREREQUISITE--MATH. 122 OR 123.
3 HOURS

LECT-DISC	B1	9	MTUWTHFS	110	A	H
LECT-DISC	B2	9	MTUWTHFS	145	A	H

MATH 142 CALCULUS.
SECOND COURSE FOR STUDENTS OF MATHEMATICS AND ENGINEERING.
PREREQUISITE--MATH. 132.
3 HOURS

LECT-DISC	C1	10	MTUWTHFS	110	A	H

MATH 143 CALCULUS.
SECOND COURSE FOR STUDENTS OF MATHEMATICS AND ENGINEERING.
PREREQUISITE--MATH. 133.
5 HOURS

LECT-DISC	A1	8-10	MTUWTHF	147	A	H

COURSES FOR ADVANCED UNDERGRADUATES

MATH 202 MATHEMATICS FOR ELEMENTARY TEACHERS.
A SYSTEMATIC PRESENTATION OF ELEMENTARY MATHEMATICS FOR JUNIORS WHO ARE PREPARING TO TEACH IN ELEMENTARY SCHOOLS. -NOT ACCEPTABLE FOR CREDIT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES-. PREREQUISITE--JUNIOR STANDING IN ELEMENTARY EDUCATION.
5 HOURS

LECT-DISC	C1	10-12	MTUWTHF	314	A	H	BARTRAM

MATH 295 INTRODUCTION TO THE USE OF DIGITAL COMPUTERS.
STUDY OF PROPERTIES OF VARIOUS COMPUTERS AND DISCUSSION OF PREPARATION OF PROGRAMS FOR ILLIAC AND IBM 650. USE OF THESE MACHINES. PREREQUISITE--ONE YEAR OF CALCULUS OR STATISTICS AND JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
4 HOURS

LECT-DISC	E1	1	MTUWTHF	314	A H	DICKMAN
		2	M	314	A H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MATH 300 THE THEORY OF SETS AND THE REAL NUMBER SYSTEM.
DEALS WITH ELEMENTARY NAIVE SET THEORY AND THE DEVELOPMENT OF THE INTEGERS, THE RATIONAL NUMBERS, AND THE REAL NUMBERS. THE PRINCIPAL EMPHASIS IS UPON THE MATHEMATICAL NEEDS OF THE SECONDARY SCHOOL TEACHER. PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT
*SECTION D1 IS FOR NSF INSTITUTE STUDENTS AND MEETS FOR TWELVE WEEKS BEGINNING JULY 2 AND ENDING SEPTEMBER 7. REGISTRANTS ARE SUBJECT TO SPECIAL FEES.

LECT-DISC	C1	10	MTUWTHF	147	A H	PETERS
		3	TH	147	A H	
	*D1	ARR				DJORUP

MATH 302 FUNDAMENTAL CONCEPTS OF GEOMETRY.
PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

LECT-DISC	A1	8	MTUWTHF	145	A H	SCHUBERT
		3	TU	145	A H	

MATH 306 SELECTED MATHEMATICAL TOPICS FOR SECONDARY SCHOOL TEACHERS, I.
DEALS WITH THE TEACHING OF THE FOLLOWING TOPICS IN SECONDARY SCHOOL MATHEMATICS--SYMBOLISM AND NUMBERS, DIRECTED NUMBERS, VARIABLES, EQUATIONS--LINEAR, QUADRATIC, SYSTEMS--SETS, GRAPHS, BASES OF ENUMERATIONS, FUNCTIONS, CRITICAL EXAMINATION OF THESE TOPICS. PREREQUISITE--ONE YEAR OF SECONDARY SCHOOL TEACHING IN MATHEMATICS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
*SECTION C1 IS FOR NSF INSTITUTE STUDENTS AND MEETS FOR TWELVE WEEKS BEGINNING JUNE 19 AND ENDING AUGUST 24. REGISTRANTS ARE SUBJECT TO SPECIAL FEES.

LECT-DISC	*C1	ARR				HART

MATH 311 ADVANCED ALGEBRA.
FOR STUDENTS INTERESTED IN ACTUARIAL SCIENCE, STATISTICS, OR TEACHER TRAINING IN MATHEMATICS. PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

LECT-DISC	B1	9	MTUWTHF	155	A H	PETERS
		3	W	155	A H	

MATH 315 LINEAR TRANSFORMATIONS AND MATRICES.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

LECT-DISC	B1	9	MTUWTHFS	102	A H
LECT-DISC	D1	11	MTUWTHFS	159	A H
LECT-DISC	D2	11	MTUWTHFS	145	A H

MATH 317 INTRODUCTION TO HIGHER ALGEBRA.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

LECT-DISC	B1	9	MTUWTHF	165	A H	HARVEY
LECT-DISC		3	W	165	A H	

MATH 318 INTRODUCTION TO HIGHER ALGEBRA.
CONTINUATION OF MATH. 317. PREREQUISITE--MATH. 317.
3 HOURS, OR 1 UNIT

LECT-DISC	B1	9	MTUWTHF	169	A H	SCHUBERT
	B1	3	W	169	A H	

MATH 327 INTRODUCTION TO HIGHER GEOMETRY.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS. OR 1 UNIT

LECT-DISC	C1	10	MTUWTHF	145	A	H	MENDEL
		3	TH	145	A	H	

MATH 332 TOPOLOGICAL SPACES.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH 347.
3 HOURS. OR 1 UNIT

LECT-DISC	D1	11	MTUWTHF	147	A	H	BISHOP
		3	M	147	A	H	

MATH 343 ADVANCED CALCULUS.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS. OR 1 UNIT

LECT-DISC	A1	8	MTUWTHFS	155	A	H	
LECT-DISC	B1	9	MTUWTHFS	173	A	H	
LECT-DISC	C1	10	MTUWTHFS	155	A	H	
LECT-DISC	D1	11	MTUWTHFS	155	A	H	

MATH 345 DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS.
PREREQUISITE--ONE YEAR OF CALCULUS. CREDIT IS NOT GIVEN
FOR BOTH MATH. 345 AND MATH. 349.
3 HOURS. OR 1 UNIT

LECT-DISC	A1	8	MTUWTHFS	102	A	H	
LECT-DISC	B1	9	MTUWTHFS	241	A	H	
LECT-DISC	C1	10	MTUWTHFS	165	A	H	
LECT-DISC	D1	11	MTUWTHFS	165	A	H	

MATH 346 COMPLEX VARIABLES AND APPLICATIONS.
FOR STUDENTS WHO DESIRE A WORKING KNOWLEDGE OF COMPLEX VARIABLES.
THE COURSE COVERS THE STANDARD TOPICS AND, IN ADDITION, GIVES AN
INTRODUCTION TO INTEGRATION BY RESIDUES, THE ARGUMENT PRINCIPLE,
CONFORMAL MAPS, LAPLACE TRANSFORMS, AND POTENTIAL FIELDS.
STUDENTS DESIRING A SYSTEMATIC DEVELOPMENT OF THE FOUNDATIONS OF THE
SUBJECT SHOULD TAKE MATH. 348. CREDIT IS NOT ALLOWED IN BOTH MATH.
346 AND MATH. 348. PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR
3 HOURS. OR 1 UNIT

LECT-DISC	A1	8	MTUWTHFS	110	A	H	
LECT-DISC	C1	10	MTUWTHFS	169	A	H	
LECT-DISC	D1	11	MTUWTHFS	169	A	H	

MATH 347 INTRODUCTION TO HIGHER ANALYSIS, REAL VARIABLES.
PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1 UNIT

LECT-DISC	C1	10	MTUWTHF	173	A	H	EUSTICE
		3	TH	173	A	H	
LECT-DISC	D1	11	MTUWTHF	173	A	H	MENDEL
		3	M	173	A	H	

MATH 363 ADVANCED STATISTICS.
PROBABILITY AND STATISTICAL INFERENCE. PREREQUISITE--ONE YEAR OF
CALCULUS.
3 HOURS. OR 1 UNIT

LECT-DISC	B1	9	MTUWTHF	243	A	H	L. LOW
		3	W	243	A	H	

MATH 388 MATHEMATICAL METHODS IN ENGINEERING AND SCIENCE.
PREREQUISITE--MATH. 343.
3 HOURS. OR 1 UNIT

LECT-DISC	A1	8	MTUWTHF	165	A	H	SCOTT
		3	TU	165	A	H	

COURSES FOR GRADUATES

MATH 401 THEORY OF FIELDS.
PREREQUISITE--MATH. 317 AND 318. OR EQUIVALENT.
1 UNIT

LECT-DISC	E1	1	MTUWTHF	108	A	H	SACHS

MATH 428 TOPICS IN GEOMETRY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION B1 IS FOR ACADEMIC YEAR INSTITUTE STUDENTS.

LECT-DISC	*B1	9	MTUWTHF	314 A H	BISHOP

MATH 442 MEASURE AND INTEGRATION.
PREREQUISITE--MATH. 347, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	D1	11	MTUWTHF	110 A H	WEINBERG

MATH 468 TOPICS IN ANALYSIS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION D1 IS FOR ACADEMIC YEAR INSTITUTE STUDENTS

LECT-DISC	*D1	11	MTUWTHF	106 L H	ZARING

MATH 490 READING COURSE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS

CONF	ARR	

MATH 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR	

MECHANICAL ENGINEERING

DEPARTMENT OFFICE 144 M E B

COURSES FOR UNDERGRADUATES

M E 186 PRINCIPLES OF METAL CUTTING AND FORMING.
PREREQUISITE--CREDIT OR REGISTRATION IN INTEGRAL CALCULUS AND PHYSICS 107.
3 HOURS

LECT-DISC	P	9	MTUWTH	218 M E B	TURKOVICH
LAB	P	2-5	M W	217 M E B	WOZNIAK

COURSES FOR ADVANCED UNDERGRADUATES

M E 224 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 221, OR M E 222, T A M 221, CREDIT OR REGISTRATION IN T A M 223.
3 HOURS

LECT-DISC	P	10-12	MTUWTHFS	358 M E B	SCHMIDT

M E 234 HEAT TREATMENT OF METALS.
PREREQUISITE--T A M 221. CREDIT OR REGISTRATION IN M E 224 AND T A M 223.
3 HOURS

LECT-DISC	P	1	MTUWTH	110 M E B	SINGER
LAB	P	2-5	TU TH	110 M E B	RAMALINGAM
	P	2-5	TU TH	114 M E B	

M E 263 APPLICATION OF ENERGY CONCEPTS TO POWER PROCESSES.
PREREQUISITE--M.E. 206 AND 212
5 HOURS

LECT-DISC	P	7	MTUWTHFS	204 M E L	HEBRANK AND
LAB	P	8-10	MTUWTH	204 M E L	STAFF
	P	8-10	MTUWTH	101 M E B	
	P	8-10	MTUWTH	M E LAB	

M E 264 HEAT POWER LABORATORY.
PREREQUISITE--M E 212 AND 263.
3 HOURS

LAB	P	8-10	MTUWTHFS	204	M E L	HULL AND
	P	8-10	MTUWTHFS	101	M E B	STAFF
	P	8-10	MTUWTHFS M E LAB			

M E 271 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 224.
3 HOURS

LECT-DISC	P	10-12	MTUWTHFS	343	M E B	OFFNER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

M E 305 THERMODYNAMICS OF HIGH VELOCITY FLOW.
PREREQUISITE--M.E. 206 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 OR 1 UNIT

LECT-DISC	P	ARR		136	M E B	CHOW

M E 341 ENGINEERING ANALYSIS AND DESIGN.
PREREQUISITE--M E 271. SENIOR STANDING. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 OR 1 UNIT

LECT-DISC	P	10-12	MTUWTHFS	335	M E B	BAYNE

COURSES FOR GRADUATES

M E 438 LABORATORY INVESTIGATIONS IN POWER MACHINERY.
PREREQUISITE--ONE-YEAR COURSE IN POWER LABORATORY.
1/2 TO 1 1/2 UNITS

CONF	ARR		HULL

M E 448 LABORATORY INVESTIGATIONS IN MACHINE DESIGN.
1/2 TO 1 1/2 UNITS. SUMMER--1 UNIT
STUDY OF ADVANCED PROBLEMS RELATED TO MACHINE DESIGN TECHNOLOGY.
REGISTRATION RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK
SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR
INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING
IN TECHNICAL AND PRE-ENGINEERING CURRICULA.

LECT-DISC		10-12	MTUWTHF	114	T B	BROGHAMER

M E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

METALLURGICAL ENGINEERING

DEPARTMENT OFFICE 311 CER

COURSES FOR GRADUATES

MET E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

	ARR	STAFF

MICROBIOLOGY

DEPARTMENT OFFICE 127 BURRILL HALL

MAJOR--TWENTY HOURS OF MICROBIOLOGY, EXCLUSIVE OF MCBIO. 100 AND 101 D.S. 350 MAY BE SELECTED AS PART OF THE MAJOR.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, PHYSICS, PHYSIOLOGY, AND ZOOLOGY.

COURSES FOR UNDERGRADUATES

MCBIO 100 INTRODUCTORY MICROBIOLOGY.
AN INTRODUCTION TO THE PRINCIPAL ACTIVITIES AND PROPERTIES OF MICROORGANISMS, INCLUDING BACTERIA, YEASTS, MOLDS, AND VIRUSES. THE ROLE OF NATURAL PROCESSES, SUCH AS PHOTOSYNTHESIS, WILL BE CONSIDERED, AS WELL AS MANS USE AND CONTROL OF MICROORGANISMS IN THE PRODUCTION OF ANTIBIOTICS AND VACCINES, IN INDUSTRIAL FERMENTATIONS, IN SANITATION AND PUBLIC HEALTH, AND IN AGRICULTURE.
3 HOURS

LECT	8	MTUWTHF	124	BUR HALL	DEPINTO

MCBIO 101 INTRODUCTORY EXPERIMENTAL MICROBIOLOGY.
AN INTRODUCTION TO THE EXPERIMENTAL TECHNIQUES WHICH ARE EMPLOYED IN THE INVESTIGATION OF MICROBIAL ACTIVITIES AND PROPERTIES. LABORATORY EXPERIMENTS WILL POSE QUESTIONS CONCERNING THE NUTRITION OF MICROORGANISMS, THE EFFECT OF HEAT, ANTIBIOTICS, AND CHEMOTHERAPEUTIC DRUGS ON MICROORGANISMS, AND THE CHEMICAL TRANSFORMATIONS PERFORMED BY MICROORGANISMS. PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 100.
2 HOURS

LAB	9-12	M W	242	BUR HALL	DEPINTO
	9-11	F	242	BUR HALL	AND ASSOCIATES

COURSES FOR ADVANCED UNDERGRADUATES

MCBIO 207 RESEARCH AND SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING, TWENTY HOURS OF MICROBIOLOGY, CONSENT OF INSTRUCTOR.
3 TO 5 HOURS

LAB	ARR		STAFF

COURSES FOR GRADUATES

MCBIO 490 INDIVIDUAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR
1/2 TO 2 UNITS

	ARR	BUR HALL	STAFF

MCBIO 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

	ARR	BUR HALL	STAFF

MINING ENGINEERING

DEPARTMENT OFFICE 311 CER

COURSES FOR GRADUATES

MIN E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

	ARR	STAFF

DEPARTMENT OFFICE 100 S M H

COURSES FOR UNDERGRADUATES

MUSIC 106 COMPOSITION.
MUSICAL COMPOSITION IN ITS BEGINNING AND SECONDARY STAGES. PRACTICE IN PHRASE, SENTENCE, AND PERIOD ANALYSIS AND WRITING, WRITING OF THE SHORTER FORMS OF MUSIC AND INSTRUCTION IN THE RANGES, CHARACTERISTICS AND IDIOM OF INSTRUMENTS. REQUIRED OF STUDENTS MAJORING IN COMPOSITION. PREREQUISITE--QUALIFYING EXAMINATION IN COMPOSITION.
4 HOURS
STUDENTS DESIRING TO SATISFY FRESHMAN OR SOPHOMORE THEORY REQUIREMENTS MAY TAKE THIS COURSE.

LECT-DISC	A	9	MTUWTHF	106	S M H	JOHNSTON
LECT-DISC	B	10	MTUWTHF	106	S M H	JOHNSTON
CONF	C	ARR		23	T A	JOHNSTON

MUSIC 130 INTRODUCTION TO THE ART OF MUSIC, I.
DESIGNED PRIMARILY FOR THE LAYMAN, TO TRAIN STUDENTS IN INTELLIGENT LISTENING AND TO ACQUAINT THEM WITH MANY GREAT WORKS OF THE LITERATURE OF MUSIC. FOR NON-MUSIC STUDENTS ONLY. STUDENTS WILL REGISTER FOR THE LECTURE AND ONE QUIZ SECTION. THIS COURSE WITH MUSIC 131 AND EITHER 312 OR 313 SATISFIES GENERAL EDUCATION REQUIREMENTS IN HUMANITIES IN L A S.
3 HOURS

LECT	A	9	MTUWTH	25	S M H	RINGER
QUIZ	A	7PM	TU TH	1203	W NEV RM104	

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 231 CHORAL LITERATURE AND CONDUCTING, II.
CONTINUATION OF MUSIC 230. PREREQUISITE--MUSIC 230.
2 HOURS

LAB-DISC	A	2	TUWTHF	1203	W NEV RM104	KIRK

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 306 COMPOSITION.
WORK IN ORIGINAL COMPOSITION INCLUDING THE SMALL AND LARGE HOMOPHONIC FORMS. PREREQUISITE--MUSIC 104 OR 106 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 TO 1 UNIT

CONF		ARR		23	T A	JOHNSTON

MUSIC 311 MUSIC IN THE RENAISSANCE.
A HISTORY OF MUSIC FROM ABOUT 1400 TO 1600. PREREQUISITE--MUSIC 214 OR 310.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	1	TUWTHF	101	H A	PLAMENAC

MUSIC 313 MUSIC OF THE NINETEENTH AND TWENTIETH CENTURIES.
A HISTORY OF MUSIC FROM ABOUT 1800 TO THE PRESENT. PREREQUISITE--MUSIC 214 OR 312. THIS COURSE OR MUSIC 312 WITH 130 AND 131 SATISFIES GENERAL EDUCATION REQUIREMENTS IN HUMANITIES IN LAS.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	2	TUWTHF	1203	W NEV RM116	GOLDTHWAITE
QUIZ	A	7PM	M W	1203	W NEV RM116	

MUSIC 330 APPLIED MUSIC PEDAGOGY.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
EMPHASIS WILL BE PLACED ON STRING INSTRUMENT MATERIALS
FOR PUBLIC SCHOOLS.

LECT-DISC	A	9	TUWTHF	5	S M H	WALLER

MUSIC 341 ADVANCED INSTRUMENTAL ADMINISTRATION.
ADMINISTRATION OF BANDS AND ORCHESTRAS IN PUBLIC SCHOOLS AND
COLLEGES. PREREQUISITE--ADVANCED UNDERGRADUATE OR GRADUATE
WITH MAJOR WORK OR EXPERIENCE IN BAND OR ORCHESTRA.
4 HOURS, OR 1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED

LECT-DISC	A	*1	MTUWTHF	228	BAND	KISINGER

MUSIC 345 TEACHING TECHNIQUES OF MUSIC THEORY.
PREREQUISITE--MUSIC 300 OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	2	MTUWTH	106	S M H	CARTER

MUSIC 346 WORKSHOP IN MUSIC EDUCATION.
WORKSHOP DESIGNED TO DEVELOP ESSENTIAL FACTS, ATTITUDES, AND
PRINCIPLES THROUGH A CONSIDERATION OF PROBLEMS ENCOUNTERED IN
MUSIC EDUCATION. PARALLEL WITH THIS STUDY WILL BE THE PREPARATION
OF RESOURCE MATERIALS FOR MUSIC PROGRAMS IN ELEMENTARY AND
SECONDARY SCHOOLS. PREREQUISITE--SENIOR OR GRADUATE STANDING IN
MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
CREDIT MAY BE ACCUMULATED TO A MAXIMUM OF 2 UNITS.
2 OR 4 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	A	2-4	TUWTHF	102	S H	BERGETHON

MUSIC 348 TEACHING OF BRASS INSTRUMENTS.
DESIGNED PRIMARILY FOR TEACHERS OF INSTRUMENTAL MUSIC IN THE
PUBLIC SCHOOLS. PREREQUISITE--SENIOR OR GRADUATE STANDING IN
MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	14	S M H	GRAY, SEXTON

COURSES FOR GRADUATES

MUSIC 401 ADVANCED INSTRUMENTATION-BAND.
PREREQUISITE--UNDERGRADUATE INSTRUMENTATION.
1/2 TO 1 UNIT

LECT-DISC	A	3-5	TU TH	167	BAND	HINDSLEY

MUSIC 406 COMPOSITION.
ADVANCED STUDY OF CONTRAPUNTAL FORMS, STUDY OF CONTEMPORARY MELODIC
AND HARMONIC PRACTICES, ORIGINAL WORK IN ADVANCED COMPOSITION.
1/2 TO 1 1/2 UNIT

CONF	A	ARR		21	T A	KELLY

MUSIC 418 THE ORIGINS AND HISTORY OF OPERA UP TO GLUCK.
THE ANTECEDENTS OF OPERA IN THE SIXTEENTH CENTURY, SOCIAL, CULTURAL,
INTELLECTUAL FORCES LEADING UP TO ITS DEVELOPMENT, STUDY OF SCORES,
LIBRETTOS, SCENOGRAPHY, READINGS OR PERFORMANCE PRACTICES, THEORY
AND AESTHETICS OF OPERA. THE PRINCIPAL COMPOSERS COVERED ARE
MONTEVERDI, CAVALLI, CESTI, LULLY, RAMEAU, BLOW, PURCELL, SCARLATTI,
HANDEL, GLUCK. PREREQUISITE--MUSIC 312 OR CONSENT OF INSTRUCTOR.
1/2 UNIT

LECT-DISC	A	3	TUWTHF	1203	W NEV RM104	PLAMENAC

MUSIC 432 ADVANCED CHORAL TECHNIQUES.
AN INTENSIVE LABORATORY APPROACH TO THE DEVELOPMENT OF ADVANCED
TECHNIQUES NECESSARY FOR WORKING EFFECTIVELY WITH CHORAL ENSEMBLES.
PREREQUISITE--GRADUATE STANDING IN MUSIC.
1 UNIT

LAB-DISC	A	11	TUWTHF	1203	W NEV RM104	KIRK

MUSIC 433 ADVANCED CHORAL LITERATURE AND CONDUCTING.
AN INTENSIVE SURVEY OF CHORAL LITERATURE WITH LABORATORY ORGANIZATION FOR READING, CONDUCTING AND INTERPRETATION OF CHORAL MUSIC OF ALL PERIODS, STYLES, AND VOICE ARRANGEMENTS. PREREQUISITE-GRADUATE STANDING IN MUSIC, MUSIC 432 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED.

LAB-DISC	A	*11	TUWTHF	25	S M H		DECKER

MUSIC 438 WIND INSTRUMENT LITERATURE.
AN INTEGRATING COURSE OFFERING THE OPPORTUNITY TO SURVEY, AT THE GRADUATE LEVEL, THE FIELD OF SOLO AND ENSEMBLE WIND LITERATURE. THE MATERIAL INCLUDES ANALYSIS AND PERFORMANCE WHEN POSSIBLE OF THE MUSIC ITSELF, RECORDINGS, AND COLLATERAL READINGS. STUDENTS MAY RE-REGISTER FOR A TOTAL OF 2 UNITS.
1 UNIT
*SECTION A--WOODWIND AND SECTION B--BRASS.

LAB-DISC	A	11	TUWTHF	228	BAND		KISINGER

MUSIC 440 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION, I.
A CONSIDERATION OF THE HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF MUSIC EDUCATION, THE APPLICATION OF THE PRINCIPLES OF EDUCATION TO THE MUSIC PROGRAM. MAJOR EMPHASIS IS PLACED ON CURRENT TRENDS IN EDUCATIONAL THOUGHT AND THEIR IMPLICATIONS FOR MUSIC EDUCATION. PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

LECT-DISC	A	8	TUWTHF	103	S M H		PETZOLD

MUSIC 442 THE GENERAL MUSIC PROGRAM IN SECONDARY SCHOOLS.
A DETAILED CONSIDERATION OF THE GENERAL MUSIC PROGRAM, ITS OBJECTIVES, ORGANIZATION AND OPERATION. SPECIAL ATTENTION IS GIVEN TO MATERIALS, AND METHODS OF TEACHING. PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION.
1/2 TO 1 UNIT

LECT-DISC	A	9	TUWTHF	1203	W NEV	RM116	KIRK

MUSIC 445 MUSIC IN HIGHER EDUCATION.
AN ORIENTATION TO THE ORGANIZATION, TEACHING, AND ADMINISTRATION OF MUSIC IN THE COLLEGE AND UNIVERSITY. PREREQUISITE--GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION.
1/2 TO 1 UNIT

LECT-DISC	A	10	TUWTHF	102	S H		BERGETHON

APPLIED MUSIC

NOTE--STUDENTS IN MUSIC CURRICULA RECEIVE THREE OR FOUR HOURS FOR THEIR MAJOR OR PRINCIPAL SUBJECT.

AS A PART OF THE REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE, SENIOR STUDENTS MUST PRESENT A PUBLIC RECITAL WHICH MEETS WITH SCHOOL OF MUSIC FACULTY APPROVAL AND CONFORMS WITH DEPARTMENTAL REQUIREMENTS.

MUSIC STUDENTS RECEIVE TWO HOURS CREDIT FOR THEIR MINOR OR SECONDARY SUBJECT.

STUDENTS FROM OTHER COLLEGES RECEIVE TWO HOURS CREDIT FOR WORK IN APPLIED MUSIC IF IN ACCORDANCE WITH THE REGULATIONS OF THEIR COLLEGE PASSING OF A PERFORMING EXAMINATION IS REQUIRED AS A PREREQUISITE TO THE INITIAL REGISTRATION IN ANY APPLIED MUSIC COURSE.

APPLIED MUSIC COURSES FOR UNDERGRADUATES

MUSIC 180 PIANO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — AITKEN, BILSON SANDERS

MUSIC 181 VOICE.
2 OR 3 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — BAILEY, BERNAC BOWEN

MUSIC 182 ORGAN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS.
CONF ARR — MILES

MUSIC 183 VIOLIN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — ROLLAND

MUSIC 184 VIOLA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — ROLLAND

MUSIC 185 CELLO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — SWENSON

MUSIC 186 STRING BASS.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — KROLICK

MUSIC 187 FLUTE.
2 OR 4 HOURS, SUMMER--1 OR 2 UNITS
CONF ARR — EDLEFSEN

MUSIC 188 CLARINET.
2 OR 4 HOURS, SUMMER--1 OR 2 UNITS
CONF ARR — COGGINS

MUSIC 189 OBOE.
2 OR 4 HOURS, SUMMER--1 OR 2 UNITS
CONF ARR — EDLEFSEN

MUSIC 190 BASSOON.
2 OR 4 HOURS, SUMMER--1 OR 2 UNITS
CONF ARR — EDLEFSEN

MUSIC 191 CORNET AND TRUMPET.
2 OR 4 HOURS, SUMMER--1 OR 2 UNITS
CONF ARR — SEXTON

MUSIC 192 FRENCH HORN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — SEXTON

MUSIC 193 TROMBONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — GRAY

MUSIC 194 BARITONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — GRAY

MUSIC 195 TUBA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF ARR — GRAY

MUSIC 198 ALTO SAXOPHONE.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR COGGINS

APPLIED MUSIC COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PREREQUISITE--FOR STUDENTS IN THE BACHELOR OF MUSIC CURRICULUM. JUNIOR STANDING IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN MUSIC EDUCATION. COMPLETION OF THE CURRICULAR REQUIREMENT IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN OTHER COLLEGES OF THE UNIVERSITY. COMPLETION OF FOUR SEMESTERS IN THE COMPARABLE APPLIED MUSIC COURSE AT THE 100 LEVEL.

MUSIC 380 PIANO.
PREREQUISITE--COMPLETION OF COMPARABLE COURSE AT THE 100 LEVEL. QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR AITKEN. BILSON
SANDERS

MUSIC 381 VOICE.
PREREQUISITE--MUS. 181 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 3 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR BAILEY. BOWEN
BERNAC

MUSIC 382 ORGAN.
PREREQUISITE--MUS. 182 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR MILES

MUSIC 383 VIOLIN.
PREREQUISITE--MUS. 183 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR ROLLAND

MUSIC 384 VIOLA.
PREREQUISITE--MUS. 184 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR ROLLAND

MUSIC 385 CELLO.
PREREQUISITE--MUS. 185 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR SWENSON

MUSIC 386 STRING BASS.
PREREQUISITE--MUS. 186 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR KROLICK

MUSIC 387 FLUTE.
PREREQUISITE--MUS. 187 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR EDLEFSEN

MUSIC 388 CLARINET.
PREREQUISITE--MUS. 188 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR COGGINS

MUSIC 389 OBOE.
PREREQUISITE--MUS. 189 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR EDLEFSEN

MUSIC 390 BASSOON.
PREREQUISITE--MUS. 190 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR EDLEFSEN

MUSIC 391 CORNET AND TRUMPET.
PREREQUISITE--MUS. 191 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR SEXTON

MUSIC 392 FRENCH HORN.
PREREQUISITE--MUS. 192 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR SEXTON

MUSIC 393 TROMBONE.
PREREQUISITE--MUS. 193 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR GRAY

MUSIC 394 BARITONE.
PREREQUISITE--MUS. 194 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR GRAY

MUSIC 395 TUBA.
PREREQUISITE--MUS. 195 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR GRAY

MUSIC 398 SAXOPHONE.
PREREQUISITE--MUS. 198 AND QUALIFYING EXAM FOR TRANSFER STUDENTS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR COGGINS

APPLIED MUSIC COURSES FOR GRADUATES

MUSIC 480 PIANO.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A
QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
GRADUATE APPLIED MUSIC FACULTY
CONF ARR

MUSIC 481 VOICE.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A
QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
GRADUATE APPLIED MUSIC FACULTY
CONF ARR

MUSIC 482 ORGAN.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A
QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
GRADUATE APPLIED MUSIC FACULTY
CONF ARR

MUSIC 483 GRADUATE APPLIED MUSIC--STRING INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF
QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT
GRADUATE APPLIED MUSIC FACULTY
CONF ARR

MUSIC 484 GRADUATE APPLIED MUSIC--WIND INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE. SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

CONF	ARR		GRADUATE APPLIED MUSIC FACULTY

MUSIC 489 DOCTORAL PROJECTS.
SPECIAL PROJECTS FOR CANDIDATES FOR THE DEGREE OF DOCTOR OF MUSICAL ARTS. OPEN ONLY TO STUDENTS IN THE DOCTOR OF MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 3 UNITS.

CONF	A	ARR	GRADUATE FACULTY

MUSIC 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF ADVISOR.
0 TO 4 UNITS. SUMMER--0 TO 2 UNITS

CONF	A	ARR	GRADUATE FACULTY

SUPPLEMENTARY INSTRUMENTS

NOTE--THESE COURSES ARE OPEN AS ELECTIVES TO STUDENTS FROM OTHER COLLEGES. IN COURSES INVOLVING TWO INSTRUMENTS, TWO DAYS A WEEK ARE SPENT ON EACH INSTRUMENT FOR THE ENTIRE SEMESTER. PREREQUISITE FOR ALL NON-MUSIC STUDENTS--CONSENT OF INSTRUCTOR.

COURSES FOR UNDERGRADUATES

MUSIC 170 STRING INSTRUMENTS.
CLASS INSTRUCTION IN THE FUNDAMENTALS OF PLAYING VIOLIN, VIOLA, CELLO, AND STRING BASS. PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
2 HOURS
*SECTION A IS FOR BEGINNERS.

LAB-DISC	*A	8	MTUWTHF	5	S M H		WALLER

MUSIC 177 CLASS PIANO INSTRUCTION.
FOR MUSIC STUDENTS AND STUDENTS FROM OTHER COLLEGES. PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

LAB-DISC	A	1	TUWTHF	1	S H		LYKE
LAB-DISC	B	2	TUWTHF	1	S H		LYKE

COURSES FOR ADVANCED UNDERGRADUATES

ENSEMBLE COURSES

MUSIC 250 UNIVERSITY ORCHESTRA.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 HOUR

PRACT	A	730-930PM	TH	RECITAL HALL		RABIN

MUSIC 261 UNIVERSITY CHORUS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 HOUR

PRACT	A	12	TUWTHF	25	S M H		DECKER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 350 ADVANCED ENSEMBLE MUSIC.
SELECTED PROJECTS IN THE STUDY AND PERFORMANCE OF ENSEMBLE LITERATURE, INCLUDING THE AREAS OF OPERATIC, INSTRUMENTAL, AND VOCAL-CHORAL MUSIC AND ACCOMPANYING. PREREQUISITE--REGISTRATION IN APPLIED MUSIC AT THE 300 LEVEL AND CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
*SECTION A IS FOR INSTRUMENTAL.

PRACT	A	ARR		F S A		ROLLAND, SWENSON

MUSIC LITERATURE COURSES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 320 PROSEMINAR.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
2 OR 4 HOURS, OR 1/2 OR 1 UNIT

CONF	A	ARR				PETZOLD AND MUSICOLOGY FACULTY

COURSES FOR GRADUATES

MUSIC 420 SEMINAR IN MUSIC LITERATURE.
INTENSIVE STUDY OF OUTSTANDING WORKS FROM ALL FIELDS OF MUSIC LITERATURE. PREREQUISITE--CONSENT OF INSTRUCTOR. MAXIMUM ACCUMULATED CREDIT 2 UNITS.
1 UNIT

LECT-DISC	A	3-5	M	F	101	H A	GOLDTHWAITE

MUSIC 427 BEETHOVEN, II.
1/2 OR 1 UNIT

LECT-DISC	A	10	MTUWTH	101	H A	RINGER

NUCLEAR ENGINEERING

DEPARTMENT OFFICE 264 M E B

COURSES FOR GRADUATES

NUC E 451 REACTOR LABORATORY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT

LAB-DISC	ARR	STAFF

NUC E 454 NUCLEAR ENGINEERING LABORATORY INVESTIGATIONS.
PREREQUISITE--PHYCS. 282 OR 382 AND CONSENT OF INSTRUCTOR.
1/2 TO 1 1/2 UNITS

CONF	ARR	STAFF

NUC E 490 SPECIAL TOPICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
A--REACTOR KINETICS
LECT 8-10 MTUWTHF 252 M E B STAFF

NUC E 495 NUCLEAR ENGINEERING PROBLEMS.
PREREQUISITE--AT LEAST THREE UNITS OF GRADUATE WORK AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
CONF ARR STAFF

NUC F 499 THESIS RESEARCH .
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

PHILOSOPHY

DEPARTMENT OFFICE 121 L H

MAJOR--TWENTY HOURS FROM ANY COURSES OFFERED BY THE DEPARTMENT, INCLUDING PHIL. 102, 303, 306, 321, AND ONE ADDITIONAL 300 COURSE IN PHILOSOPHY.

MINORS--TWENTY HOURS SELECTED FROM THE COURSES OF ANY ONE OR TWO DEPARTMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES EXCLUDING RHET. 101, 102, AND FIRST-YEAR MODERN LANGUAGE COURSES, OR FROM ANY APPROVED L.A.S. INTERDEPARTMENTAL CURRICULUM, OR FROM ECONOMICS, EDUCATION, HOME ECONOMICS, LAW, OR LIBRARY SCIENCE. IF TWO DEPARTMENTS OR CURRICULA ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH, AND THE COURSES MUST BE APPROVED BY THE DEPARTMENT OF PHILOSOPHY.

COURSES FOR UNDERGRADUATES

FRESHMAN JAMES SCHOLARS ARE AUTOMATICALLY PERMITTED TO TAKE ANY 100 PHILOSOPHY COURSE.

PHIL 101 INTRODUCTION TO PHILOSOPHY.
THIS COURSE, PLUS PHIL. 102 AND 105, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS
LECT-DISC B 9-1030 MTUWTH 117 L H CATON
LECT-DISC C 10-1130 MTUWTH 139 L H LINSKY

PHIL 102 LOGIC.
THIS COURSE, PLUS PHIL. 101 AND 105, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS
LECT-DISC C 1030-12 MTUWTH 117 L H ROWE
LECT-DISC F 2-330 MTUWTH 139 L H ROWE

PHIL 105 MORAL IDEAS AND PRACTICE.
THIS COURSE, WITH PHILOSOPHY 101 AND 102, MEETS THE GENERAL EDUCATION REQUIREMENT IN HUMANITIES IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT. CREDIT IS NOT GIVEN FOR BOTH PHIL. 105 AND 103.
2 HOURS
LECT-DISC 1 MTUWTH 139 L H HARRIS

COURSES FOR ADVANCED UNDERGRADUATES

PHIL 201 READING COURSE.
READINGS IN SELECTED TOPICS. OPEN ONLY TO JUNIORS AND SENIORS WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT. PREREQUISITE--CONSENT OF INSTRUCTOR. THIS COURSE MAY BE TAKEN BY HONOR STUDENTS IN PARTIAL FULFILLMENT OF DEPARTMENTAL HONOR REQUIREMENTS.
2 TO 4 HOURS
ARR HARRIS, TIEBOUT

PHIL 202 THESIS.
SPECIAL TRAINING IN PHILOSOPHICAL INVESTIGATION. OPEN ONLY TO SENIORS WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT. PREREQUISITE--CONSENT OF INSTRUCTOR. THIS COURSE MAY BE TAKEN BY HONOR STUDENTS IN PARTIAL FULFILLMENT OF DEPARTMENTAL HONORS REQUIREMENTS.
2 TO 4 HOURS
ARR HARRIS, TIEBOUT

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOPHOMORE JAMES SCHOLARS WHO HAVE HAD NO PHILOSOPHY COURSES ARE PERMITTED TO TAKE PHILOSOPHY 303, 306, 307, AND 308. THOSE WHO HAVE HAD A PHILOSOPHY COURSE MAY TAKE ANY 300 PHILOSOPHY COURSE.

PHIL 307 HISTORY OF MODERN PHILOSOPHY.
BACON, HOBBES, LOCKE, BERKELEY, HUME. PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306. PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	1	M W F	117 L H		LINSKY

PHIL 308 HISTORY OF MODERN PHILOSOPHY.
DESCARTES, SPINOZA, LEIBNITZ, KANT. PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306. PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	2	M W F	117 L H		CATON

PHIL 311 PHILOSOPHIC IDEAS OF THE NINETEENTH AND TWENTIETH CENTURIES.
3 HOURS, OR 3/4 TO 1 UNIT

LECT-DISC	830-10	MTUWTH	139 L H		TIEBOUT

COURSES FOR GRADUATES

PHIL 483 INDIVIDUAL TOPICS.
1/2 OR 1 UNIT. SUMMER SESSION 1/2 TO 2 UNITS
ARR HARRIS, TIEBOUT

PHIL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR HARRIS, TIEBOUT

MEN ENTERING THE UNIVERSITY WITH LESS THAN SIXTY SEMESTER HOURS OF CREDIT--EXCEPT VETERANS WHO RECEIVE CREDIT BECAUSE OF MILITARY SERVICE. BUT WHO MAY ELECT TO TAKE PHYSICAL EDUCATION--ARE REQUIRED TO OBTAIN CREDIT FOR FOUR SEMESTERS OF PHYSICAL EDUCATION. INCLUDING THE AMOUNT TRANSFERRED. CREDIT MAY BE OBTAINED BY PASSING COURSES LISTED BELOW OR BY PASSING PROFICIENCY EXAMINATIONS WHICH ARE OFFERED AT TIMES SPECIFIED BY THE DEPARTMENT. PERMITS FOR TAKING PROFICIENCY EXAMINATIONS MUST BE SECURED IN ROOM 201 MENS OLD GYMNASIUM NOT LATER THAN 48 HOURS PRECEDING EACH EXAMINATION. STUDENTS ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS IN COURSES IN WHICH THEY ARE CURRENTLY REGISTERED. STUDENTS ENROLLED IN PRESCRIBED EXERCISE ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS WITHOUT SPECIAL WRITTEN PERMISSION FROM THE COORDINATOR OF PRESCRIBED EXERCISE.

OFFICE FOR BASIC INSTRUCTION COURSES--201 MENS OLD GYMNASIUM.

OFFICE FOR PROFESSIONAL COURSES--121 HUFF GYMNASIUM.

BASIC-INSTRUCTION COURSES FOR UNDERGRADUATES

P E M 132 ARCHERY.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
HH 3-5 M W STA 65 A RANGE HOTTINGER
NOTE--FIRST CLASS MEETING IN EAST BALCONY. MENS OLD GYM ANNEX.

P E M 135 TENNIS.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
SS 3-5 TU TH STA 32 GREG CTS LEIGH
NOTE--FIRST CLASS MEETING WILL BE HELD IN NORTH BALCONY. HUFF GYM.

P E M 136 BADMINTON.
1 HOUR
SS 3-5 TU TH STA 12 100 H G BERGER

P E M 138 GOLF.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
NN 10-12 TU TH STA 26 H G FIELD KELLER
NOTE--FIRST CLASS MEETING WILL BE HELD IN WEST BALCONY. HUFF GYM.

P E M 140 CANOEING AND SMALL CRAFT OPERATION.
PREREQUISITE--ABILITY TO SWIM REASONABLY WELL A DISTANCE OF TWENTY-FIVE YARDS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
HH 3-5 M W 217 OLD GYM BECHTEL

P E M 142 BALLROOM DANCE.
SAME AS P E W 142. FOR BEGINNERS ONLY.
1 HOUR
E 1 MTUWTHF STA 56 310 W GYM HILL

PHYSICAL EDUCATION

DEPARTMENT OFFICE 121 HUFF GYM

COURSES FOR GRADUATES

P E 401 PROBLEMS IN PHYSICAL EDUCATION.
1 UNIT
LECT-DISC 8 MTUWTH 207A HUFF GYM JACKSON

P E 406 PHILOSOPHY OF SPORT.
1 UNIT
LECT-DISC 10 MTUWTH 207 HUFF GYM JACKSON

P E 407 SPORT PSYCHOLOGY.
PREREQUISITE--PSYCH. 100, ED. 211, CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 9 MTUWTH 301 HUFF GYM HUBBARD

P E 408 PRINCIPLES OF KINESIOTHERAPY.
PREREQUISITE--ANATOMY, PHYSIOLOGY, PSYCHOLOGY, KINESIOLOGY, PHYSIOLOGY OF EXERCISE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*SIX ADDITIONAL HOURS IN EXERCISE THERAPY CLINIC 3-6 MWF AFTERNOON
LECT-DISC 11 MTUWTH 106 MOG ANNEX SHELTON

P E 451 SCIENTIFIC FOUNDATIONS OF PHYSICAL FITNESS.
PREREQUISITE--UNDERGRADUATE ANATOMY AND PHYSIOLOGY, TESTS AND MEASUREMENTS.
1 UNIT
*FOUR ADDITIONAL HOURS TO BE ARRANGED.
LECT-DISC *10 MTUWTH 209 HUFF GYM CURETON-BARRY

P E 490 SEMINAR.
NO CREDIT
2-4 TU TH 209 HUFF GYM CURETON-BARRY

P E 493 SPECIAL PROJECTS.
1/2 TO 1 UNIT
ARR STAFF

P E 495 TECHNIQUES OF RESEARCH IN HEALTH, PHYSICAL EDUCATION, AND RECREATION.
1 UNIT
*FOUR ADDITIONAL HOURS IN LAB. SESSION BY APPOINTMENT.
*11 MTUWTH 301 HUFF GYM HUBBARD

P E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR STAFF

PHYSICAL EDUCATION FOR WOMEN

DEPARTMENT OFFICE 117 W GYM

FRESHMEN AND SOPHOMORES--OF THE FOUR SEMESTERS REQUIRED IN PHYSICAL EDUCATION, THE DEPARTMENT RECOMMENDS ONE SEMESTER OF BASIC MOVEMENT-P E W 103, ONE SEMESTER OF SWIMMING--P E W 110 OR 111, ONE SEMESTER OF A TEAM SPORT--P.E.W. 120, 121, 122, 123, 124, OR MODERN DANCE, P.E.W. 104, OR MODERN GYMNASTICS, P.E.W. 107, AND ONE SEMESTER OF AN ELECTIVE--P.E.W. 106, 112, 113, 114, 115, 117, 130, 131, 132, 133, 134, 135, 136, 140, 142, 143, 144, 145, OR OTHER COURSE NOT PREVIOUSLY TAKEN.

SERVICE COURSES FOR UNDERGRADUATES

P E W 110 ELEMENTARY SWIMMING.
1 HOUR
LAB H 3 MTUWTHF STA 53 POOL EB HARRIS

P E W 111 SUB-INTERMEDIATE SWIMMING.
1 HOUR
LAB J 4 MTUWTHF STA 53 POOL EB HARRIS

P E W 112 INTERMEDIATE SWIMMING.
1 HOUR
LAB J 4 MTUWTHF STA 53 POOL EB HARRIS

P E W 131 GOLF.
1 HOUR
LAB D 11 MTUWTHF STA 62 011 W GYM HARRIS

P E W 136 TENNIS.
1 HOUR
LAB B 9 MTUWTHF STA 57 311 W GYM DROM

P E W 142 BALLROOM DANCE.
SAME AS P E M 142. FOR BEGINNERS ONLY.
1 HOUR
LAB F 1 MTUWTHF STA 56 310 W GYM HILL

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E W 220 PHYSICAL EDUCATION FOR THE CLASSROOM TEACHER.
SAME AS P.E.M. 220. FOR NON-PHYSICAL EDUCATION MAJORS.
PREREQUISITE--JUNIOR STANDING.
2 HOURS
LAB-DISC A 8 MTUWTH 129 W GYM DROM

P E W 230 SECONDARY SCHOOL PROGRAM IN PHYSICAL EDUCATION FOR GIRLS.
CURRICULUM AND PROGRAM PLANNING, TEACHING OF SELECTED PHYSICAL ACTIVITIES, SOURCE MATERIALS, DESIGNED FOR TEACHERS QUALIFYING FOR STATE CERTIFICATION AS MINORS IN PHYSICAL EDUCATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
4 HOURS
*MEETS FIRST FOUR WEEKS.
LAB-DISC *A 8-12 MTUWTH 128 W GYM SOUDER

PHYSICS

DEPARTMENT OFFICE 211 P B

ENGINEERING PHYSICS CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.CURRICULUM IN PHYSICS--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.GENERAL CURRICULUM MAJOR--TWENTY HOURS IN PHYSICS, INCLUDING PHYSICS 321, 341, AND 342, AND EXCLUDING COURSES WITH NUMBERS LOWER THAN 270.

L.A.S.GENERAL CURRICULUM MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH NOT LESS THAN EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, CHEMISTRY, EDUCATION, GEOLOGY, MATHEMATICS, ZOOLOGY OR ANY ONE BRANCH OF ENGINEERING.

PHYSICS 101 AND 102 ARE RECOMMENDED TO PREMEDICAL, PREDENTAL, ARCHITECTURE, AND OTHER STUDENTS NOT SPECIALIZING IN PHYSICS, MATHEMATICS, CHEMISTRY OR ENGINEERING.

THE CALCULUS PREREQUISITE FOR CERTAIN COURSES MAY BE SATISFIED EITHER BY MATH. 132 AND 142, OR MATH. 133 AND 143.

COURSES FOR UNDERGRADUATES

PHYCS 106 GENERAL PHYSICS--MECHANICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--MATH. 122, 123--CREDIT OR REGISTRATION IN MATH. 132 OR 133.
4 HOURS

LECT		8	TUWTHF	100	P L
QUIZ	A	10-12	TU TH	305	P L
LAB	A	10-12	W F	212	P L
QUIZ	B	10-12	W F	56	M E B
LAB	B	10-12	TU TH	212	P L

PHYCS 107 GENERAL PHYSICS--HEAT, ELECTRICITY, AND MAGNETISM.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 106, CREDIT OR REGISTRATION IN MATH. 142 OR 143.
4 HOURS
*FOR JAMES SCHOLARS AND OTHER HONOR STUDENTS.

LECT	11	MTUWTH	100	P L
QUIZ	8-10	M W	305	P L
LAB	8-10	TU TH	312	P L

PHYCS 108 GENERAL PHYSICS--WAVE MOTION, SOUND, LIGHT, AND MODERN PHYSICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYSICS 107, CREDIT IN MATH. 142 OR 143.
4 HOURS
*FOR JAMES SCHOLARS AND OTHER HONOR STUDENTS.

LECT	2	MTUWTH	100	P L
QUIZ	10-12	TU TH	56	M E B
LAB	10-12	M W	312	P L

COURSES FOR GRADUATES

PHYCS 488 ADVANCED TOPICS IN NUCLEAR AND PARTICLE PHYSICS.
PREREQUISITES--PHYCS. 482 AND 484 OR CONSENT OF INSTRUCTOR.
A--NUCLEAR PHYSICS.
B--PHYSICS OF ELEMENTARY PARTICLES.
1 UNIT

LECT	A	1030-12	MTU THF	119	P L

PHYCS 498 SEMINAR.
1 TO 2 UNITS
ARR

PHYCS 499 THESIS RESEARCH.
PREREQUISITE--PREPARATION IN FIELD OF RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR

DEPARTMENT OFFICE 524 BURRILL HALL

MAJOR--TWENTY HOURS IN ANIMAL PHYSIOLOGY, OF WHICH TEN OR MORE MUST BE FROM DEPARTMENTAL COURSES IN THE ADVANCED GROUP. IN ADDITION, THE STUDENTS PROGRAM MUST INCLUDE ONE SEMESTER EACH OF VERTEBRATE EMBRYOLOGY, ORGANIC CHEMISTRY, AND PHYSICAL CHEMISTRY, AND TWO SEMESTERS OF GENERAL PHYSICS. CALCULUS IS STRONGLY RECOMMENDED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, MICROBIOLOGY, PHYSICS, ZOOLOGY.

COURSES FOR UNDERGRADUATES

PHYSL 103 INTRODUCTION TO HUMAN PHYSIOLOGY.
THE FUNCTIONING OF THE HUMAN BODY AS A WHOLE, AND THE INTERRELATIONS OF VARIOUS ORGANS AND SYSTEMS. THIS COURSE FULFILLS ONE SEMESTER OF THE GENERAL EDUCATION REQUIREMENT IN BIOLOGICAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. IT MEETS CURRICULAR REQUIREMENTS FOR STUDENTS IN THE BIOLOGY TEACHER TRAINING CURRICULUM, HOME ECONOMICS, NURSING, OCCUPATIONAL THERAPY, PHYSICAL EDUCATION, SPEECH, AND TEACHING OF HANDICAPPED CHILDREN.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT	1	MTUWTH	140	BUR HALL
LAB	2-4	M W	434	BUR HALL
DISC	2-4	TU TH	436	BUR HALL

COURSES FOR ADVANCED UNDERGRADUATES

PHYSL 290 READING COURSE.
READING IN FIELDS CHOSEN IN CONSULTATION WITH A DEPARTMENTAL ADVISOR MAY BE TAKEN IN PARTIAL FULFILLMENT OF DEPARTMENTAL HONORS REQUIREMENTS. PREREQUISITE--A COURSE IN PHYSIOLOGY, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

CONF	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PHYSL 301 GENERAL PHYSIOLOGY.
SAME AS ZOOLOGY 301. A CONSIDERATION FROM THE STANDPOINT OF EXPERIMENTAL BIOLOGY OF FUNCTIONS THAT ARE COMMON TO MOST LIVING ORGANISMS. PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS, AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHF	140	BUR HALL
LAB	9-12	MTU	523	BUR HALL
LAB	10-12	W	523	BUR HALL
DISC	9	W	523	BUR HALL

COURSES FOR GRADUATES

PHYSL 491 INDIVIDUAL TOPICS.
PREREQUISITE--APPROVAL OF DEPARTMENT.
1/2 TO 2 UNITS

	ARR	STAFF

PHYSL 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

PLANT PATHOLOGY

DEPARTMENT OFFICE 218 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PL PA 300 SPECIAL PROBLEMS.
PREREQUISITE FOR UNDERGRADUATES ONLY--MINIMUM GRADE POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION. SENIOR STANDING. CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE IN ADVANCE OF REGISTRATION. MAXIMUM CREDIT 8 HOURS OR 2 UNITS.
2 TO 4 HOURS, OR 1/4 TO 1 UNIT
BEVER, BRITTON,
CARTER,
CHAMBERLAIN, GERDEMANN
GOTTLIEB, HOOKER,
LINN, POWELL,
SHAW, SHURTLEFF, THORNBERRY
TAYLOR
ARR

COURSES FOR GRADUATES

PL PA 499 THESIS RESEARCH.
PREREQUISITE--PL. PA. 301 AND 302 OR EQUIVALENT.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
BEVER, CARTER,
CHAMBERLAIN, GERDEMANN
GOTTLIEB, HOOKER,
LINN, POWELL, SHAW, TAYLOR
THORNBERRY
ARR

POLITICAL SCIENCE

DEPARTMENT OFFICE 324 L H

MAJOR--TWENTY HOURS FROM COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE. A MAJOR MAY INCLUDE THREE SEMESTER HOURS FROM THE FOLLOWING COURSES--ECONOMICS 170, 171--STATISTICS--, ECONOMICS 214--PUBLIC FINANCE--, HISTORY 345, 346, 369, 370--CONSTITUTIONAL HISTORY--, MATHEMATICS 161--STATISTICS--, PSYCHOLOGY 135--STATISTICS AND SOCIOLOGY 185--STATISTICS--. NO STUDENT ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1961, MAY OFFER MORE THAN EIGHT HOURS OF 1 LEVEL COURSES AS PART OF A POLITICAL SCIENCE MAJOR.

MINOR--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, EDUCATION, FINANCE, GEOGRAPHY, HISTORY, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PSYCHOLOGY, SOCIAL WORK, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN-AMERICAN STUDIES RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR.

POL. SCI. 150 AND 151 GIVE A GENERAL SURVEY OF NATIONAL, STATE, AND LOCAL GOVERNMENT IN THE UNITED STATES. POL. SCI. 191 AND 192 PRESENT A SURVEY OF THE BASIC CONCEPTS AND METHODS OF POLITICAL SCIENCE AND SIGNIFICANT CURRENT GOVERNMENTAL AND POLITICAL PROBLEMS AND POLICIES. UNDERGRADUATES BEGINNING THE STUDY OF POLITICAL SCIENCE ARE ADVISED TO TAKE, FIRST, EITHER POL. SCI. 150 OR 191. STUDENTS PLANNING TO DO ADVANCED WORK SHOULD, DURING THE SOPHOMORE YEAR, TAKE EITHER POL. SCI. 150 OR 191 AND FOLLOW IT WITH SUCH OTHER COURSES AS WILL COMPLETE ONE OF THE FOLLOWING COMBINATIONS--150 AND 151, 150 AND 192, OR 191 AND 192.

COURSES FOR UNDERGRADUATES

POL S 150 AMERICAN GOVERNMENT--ORGANIZATION AND POWERS.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR. OTHER QUALIFIED FRESHMEN MAY BE ADMITTED WITH CONSENT OF DEPARTMENT. STUDENTS ARE NOT GIVEN CREDIT FOR BOTH POL. SCI. 150 AND 191.
3 HOURS
*FOR JAMES SCHOLARS AND OTHER STUDENTS HAVING A GRADE AVERAGE OF 4.0 OR ABOVE.

LECT-DISC	A	8	MTUWTHF	109	L	H	PRANGER
		4	TU	109	L	H	PRANGER
LECT-DISC	B	9	MTUWTHF	300	L	H	HOUSTON
		3	W	300	L	H	HOUSTON
LECT-DISC	D	11	MTUWTHF	303	L	H	ROSE
		3	W	303	L	H	ROSE

COURSES FOR ADVANCED UNDERGRADUATES

POL S 291 THESIS AND HONORS COURSE.
PREREQUISITE--OPEN ONLY TO SENIORS WHOSE MAJOR IS POLITICAL SCIENCE AND WHO HAVE A GENERAL UNIVERSITY AVERAGE OF AT LEAST 4.0.
2 TO 5 HOURS
ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

POL S 345 THEORY AND PRACTICE OF DEMOCRATIC GOVERNMENT.
PREREQUISITE--POLITICAL SCIENCE 150 OR 191.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	9	MTUWTHF	109	L	H	PRANGER
	3	TU	109	L	H	PRANGER

POL S 384 INTERNATIONAL RELATIONS.
STUDENTS MAY NOT RECEIVE CREDIT FOR BOTH POL.SCI. 384 AND 184.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	11	MTUWTHF	300	L	H	HOUSTON
	4	W	300	L	H	HOUSTON

COURSES FOR GRADUATES

POL S 450 CONTEMPORARY GOVERNMENTAL PROBLEMS.
WITH INSTRUCTORS PERMISSION COURSE MAY BE REPEATED FOR CREDIT PROVIDED TOTAL CREDIT DOES NOT EXCEED 3 UNITS.
1 UNIT

LECT-DISC	2-4	TU TH	301	L	H	ROSE

POL S 493 RESEARCH IN SELECTED TOPICS.
1 UNIT
ARR STAFF

POL S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR PRANGER, ROSE HOUSTON

PORTUGUESE

DEPARTMENT OFFICE 218 L H

COURSES FOR GRADUATES

PORT 491 SPECIAL TOPICS IN PORTUGUESE.
1/2 TO 1 UNIT
ARR STAFF

PORT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
ARR SHOEMAKER

PSYCHOLOGY

DEPARTMENT OFFICE 316 G H

MAJOR--TWENTY HOURS IN PSYCHOLOGY, EXCLUDING PSYCH. 100 AND 103, AND D.G.S. 171. TWO TYPES OF MAJOR PROGRAMS ARE OFFERED--THE GENERAL MAJOR, SUITABLE FOR STUDENTS INTERESTED PRIMARILY IN GENERAL LIBERAL EDUCATION, AND THE HONORS MAJOR, DESIGNED MAINLY TO PREPARE STUDENTS FOR GRADUATE STUDY IN PSYCHOLOGY.

GENERAL MAJOR--IN THIS PROGRAM THERE ARE NO PRESCRIBED COURSES.

HONORS MAJOR--THIS PROGRAM MUST INCLUDE PSYCHOLOGY 135, 290, AND TWO OF THE FOLLOWING COURSES--PSYCH. 330, 331, 345, 360, WITH THE CONSENT OF THE MAJOR ADVISOR, THE EQUIVALENT OF ANY OF THESE COURSES MAY BE SUBSTITUTED. THE HONORS MAJOR IS STRONGLY URGED TO TAKE--A - WORK IN H SECTIONS, WHEN AVAILABLE, AND IN ADVANCED COURSES IN PSYCHOLOGY. B - MATHEMATICS THROUGH CALCULUS. C - AT LEAST A FULL YEAR LABORATORY COURSE IN ANOTHER SCIENCE, D - AT LEAST TWO YEARS OF FRENCH, GERMAN, OR RUSSIAN, WITH TWO YEARS IN EACH OF TWO OF THESE BEING HIGHLY DESIRABLE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, CHEMISTRY, ECONOMICS, EDUCATION, HISTORY, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PHYSICS, PHYSIOLOGY, POLITICAL SCIENCE, SOCIAL WORK, SOCIOLOGY, SPEECH, AND ZOOLOGY.

DEPARTMENTAL DISTINCTION--THE MINIMUM REQUIREMENTS FOR GRADUATION WITH DEPARTMENTAL DISTINCTION IN PSYCHOLOGY ARE AS FOLLOWS--A - ELIGIBILITY FOR COLLEGE HONORS, B - SATISFACTORY COMPLETION OF THE COURSES REQUIRED IN THE HONORS MAJOR PROGRAM, C - FOUR HOURS OF CREDIT IN PSYCHOLOGY 291-292, INCLUDING AN ACCEPTABLE THESIS.

COURSES FOR UNDERGRADUATES

PSYCH 100 INTRODUCTION TO PSYCHOLOGY.
LECTURES, QUIZ MEETINGS, AND FIVE HOURS OF PARTICIPATION IN LABORATORY EXPERIMENTS. THIS COURSE, WITH PSYCH 101, SATISFIES THE GENERAL EDUCATION REQUIREMENT IN SOCIAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. NOT OPEN TO STUDENTS ELECTING PSYCH. 103 OR D.G.S. 171.
4 HOURS
*STUDENTS IN LECT. A MUST ELECT A QUIZ SECTION A, IN LECT. B, A QUIZ SECTION B, ETC.

LECT	*A	9	MTUWTHFS	100	G	H	MCALLISTER
QUIZ	A1	11	M W	313	G	H	
QUIZ	A2	8	W F	313	G	H	
LECT	*B	10	MTUWTHFS	100	G	H	COHEN
QUIZ	B1	8	TU TH	313	G	H	COHEN
QUIZ	B2	11	TU TH	313	G	H	COHEN

COURSES FOR ADVANCED UNDERGRADUATES

PSYCH 255 SOCIAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103. CREDIT IS NOT GIVEN FOR BOTH PSYCH. 101 AND 255.
3 HOURS

LECT-DISC	9	MTUWTHFS	315	G	H	FISHBEIN

PSYCH 256 PSYCHOLOGY OF ATTITUDE AND OPINION.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS

LECT-DISC	11	MTUWTHFS	315	G	H	FISHBEIN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PSYCH 338 ABNORMAL PSYCHOLOGY.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY, JUNIOR STANDING EXCEPT FOR THOSE IN THE PREMEDICAL CURRICULUM WHO MAY TAKE THE COURSE AS SECOND SEMESTER SOPHOMORES WITH FOUR HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	9-11	TUWTH	313	G	H	PETERSON

PSYCH 348 THE PSYCHOLOGY OF LEARNING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	1-3	TUWTH	313	G	H	MOWRER

COURSES FOR GRADUATES

NOTE--THE PREREQUISITES STATED APPLY TO GRADUATE MAJORS IN PSYCHOLOGY. STUDENTS MINORING IN PSYCHOLOGY MAY, BY SPECIAL PERMISSION OF INSTRUCTORS, ENROLL IN CERTAIN OF THESE COURSES WITHOUT HAVING MET ALL OF THE PREREQUISITES.

PSYCH 441 PERSONALITY AND BEHAVIOR DYNAMICS.
THE CROSS-SECTIONAL STRUCTURE OF PERSONALITY, THE BASIC PRINCIPLES OF BEHAVIOR DYNAMICS, AND THE DETERMINANTS WHICH SHAPE PERSONALITY DEVELOPMENT ARE DESCRIBED. SPECIAL TOPICS INCLUDE TYPOLOGIES, TRAIT MEASUREMENT, CONFLICT AND ANXIETY, AND MECHANISMS OF DEFENSE. PREREQUISITE--12 HOURS OF PSYCHOLOGY.
1 UNIT

LECT-DISC	1-5	TH	445	G	H	R. JONES

PSYCH 490 INDIVIDUAL RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR. FOR GRADUATE STUDENTS WHO WISH TO CONDUCT RESEARCH ON SPECIAL PROBLEMS NOT INCLUDED IN GRADUATE THESIS.
1/2 TO 2 UNITS

	ARR					STAFF

PSYCH 493 SEMINAR.
PREREQUISITE--SIX UNITS OF GRADUATE CREDIT IN PSYCHOLOGY--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
ARR STAFF

PSYCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
SECTION A IS FOR M.A. THESIS, SECTION B IS FOR PH. D. THESIS.
ARR STAFF

RADIO AND TELEVISION

DEPARTMENT OFFICE 38 G H

COURSES FOR ADVANCED UNDERGRADUATES

R TV 291 SPECIAL PROBLEMS.
SPECIAL PROJECTS, RESEARCH AND INDEPENDENT READING IN RADIO AND TELEVISION FOR STUDENTS CAPABLE OF INDIVIDUAL WORK UNDER THE GUIDANCE OF A FACULTY ADVISER. PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 TO 3 HOURS
CONF ARR LIPPOLD

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R TV 366 ADVANCED RADIO AND TELEVISION PRACTICES, I.
PROJECT WORK FOR ADVANCED STUDENTS IN SELECTED AREAS OF RADIO AND TELEVISION, INCLUDING NEWS, ADVERTISING, ANNOUNCING, PRODUCTION AND DIRECTION, AND WRITING. PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
ARR LIPPOLD

R TV 367 ADVANCED RADIO AND TELEVISION PRACTICES, II.
PROJECT WORK FOR ADVANCED STUDENTS IN SELECTED AREAS OF RADIO AND TELEVISION, INCLUDING NEWS, ADVERTISING, ANNOUNCING, PRODUCTION AND DIRECTION, AND WRITING. PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
ARR LIPPOLD

COURSES FOR GRADUATES

R TV 450 SPECIAL PROBLEMS IN TELEVISION.
PROJECT WORK FOR ADVANCED STUDENTS IN SPECIFIC AREAS OF TELEVISION, INCLUDING NEWS, ADVERTISING, DIRECTING, WRITING, ETC. PREREQUISITE-A TELEVISION COURSE IN THE AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY RE-REGISTER FOR A TOTAL OF 4 UNITS.
*1 TO 2 UNITS
CONF ARR STAFF

R TV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN RADIO AND TELEVISION.
1 TO 2 UNITS
CONF ARR STAFF

DEPARTMENT OFFICE 203 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

REC 278 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
STUDENTS PARTICIPATE IN LEADERSHIP ACTIVITIES SIX HOURS PER WEEK ON ASSIGNMENT IN LOCAL AND NEIGHBORING COMMUNITIES.
3 HOURS

CONF	ARR		BRIGHTBILL WEAVER

REC 279 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
STUDENTS PARTICIPATE IN LEADERSHIP ACTIVITIES SIX HOURS PER WEEK ON ASSIGNMENT IN LOCAL AND NEIGHBORING COMMUNITIES.
3 HOURS

CONF	ARR		BRIGHTBILL WEAVER

COURSES FOR GRADUATES

REC 402 RECREATION ADMINISTRATION.
PREREQUISITE--BASIC COURSES IN THE ORGANIZATION OF RECREATION OR EQUIVALENT.
1 UNIT

LECT-DISC	9	MTUWTH	207A HUFF GYM	SAPORA

REC 490 SEMINAR.
NO CREDIT

LECT-DISC	10	TU TH	211 HUFF GYM	SAPORA

REC 493 SPECIAL PROJECTS.
INDEPENDENT RESEARCH. OPEN ONLY TO STUDENTS MAJORING IN RECREATION.
PREREQUISITE--REC. 403 OR EQUIVALENT.
1/2 TO 2 UNITS. SUMMER--1/2 OR 1 UNIT
INDEPENDENT RESEARCH

ARR	SAPORA

REC 499 THESIS RESEARCH.
PREPARATION OF THESIS IN RECREATION.
1/2 TO 2 UNITS
THESIS PREPARATION

ARR	SAPORA

INCLUDING RHETORIC AND COMPOSITION, ENGLISH
FOR FOREIGN STUDENTS, AND BUSINESS ENGLISH

RHETORIC AND COMPOSITION

DEPARTMENT OFFICE 109 E B

MAJOR--TWENTY HOURS IN ENGLISH EXCLUDING RHET. 101, 102, 151, 200, 271, 272, ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND INCLUDING TEN HOURS OF ENGLISH OR AMERICAN LITERATURE. AT LEAST SIX OF WHICH MUST BE CHOSEN FROM THE ADVANCED GROUPS, AND TEN HOURS IN COMPOSITION CHOSEN FROM RHET. 143, 144, 205 206, 227, 230, 246, 255, 256, 263 AND INCLUDING AT LEAST ONE COURSE IN EXPOSITORY WRITING. WITH THE PERMISSION OF THE ADVISER, ONE OF THE FOLLOWING COURSES MAY BE COUNTED TOWARD A COMPOSITION MAJOR--SPEECH 363, JOURN. 266, 326.
STUDENTS WHO PLAN TO ENTER GRADUATE COLLEGE MUST SATISFY THE REQUIREMENTS OF TWENTY HOURS OF COURSES IN ENGLISH AND AMERICAN LITERATURE.

MINORS--TWENTY HOURS IN A--LATIN, GREEK, FRENCH, GERMAN, SPANISH, ITALIAN, OR PORTUGUESE, OR B--IN ANY TWO OF THOSE LANGUAGES, OR C--IN ONE OF THOSE LANGUAGES AND PHILOSOPHY, OR D--IN ONE OF THOSE LANGUAGES AND HISTORY, OR E--IN HISTORY AND PHILOSOPHY, OR F- IN ANY ONE OF THESE SUBJECTS AND PSYCHOLOGY. NO LANGUAGE COURSES MAY BE REGARDED AS SATISFYING THE MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THE LANGUAGE DEPARTMENT, WITH THE EXCEPTION OF ELEMENTARY COURSES IN GREEK AND LATIN, FRENCH 103, 104, ITALIAN 103, 104, SPANISH 103, 104, AND GERMAN 103, 104. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

COURSES FOR UNDERGRADUATES

RHET 101 FRESHMAN RHETORIC AND COMPOSITION.
PROVIDES ELEMENTARY TRAINING AND PRACTICE IN THE COMPREHENSION AND IN THE EXPRESSION OF WRITTEN ENGLISH.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	B	9	MTUWTHFS	114E E B
LECT-DISC	C	10	MTUWTHFS	209 E B
LECT-DISC	D	11	MTUWTHFS	114E E B

RHET 102 FRESHMAN RHETORIC AND COMPOSITION.
PROVIDES ELEMENTARY TRAINING AND PRACTICE IN THE COMPREHENSION AND IN THE EXPRESSION OF WRITTEN ENGLISH.
PREREQUISITE--RHET. 101.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8	MTUWTHFS	114E E B
LECT-DISC	B	9	MTUWTHFS	209 E B
LECT-DISC	D	11	MTUWTHFS	209 E B

RHET 133 PRINCIPLES OF COMPOSITION.
PRACTICE IN EXPOSITION, WITH EMPHASIS ON ORGANIZATION, PARAGRAPHING, SENTENCE STRUCTURE. FOR THE STUDENT WHOSE CAREER WILL REQUIRE COMPETENCE IN WRITING CLEAR, PRECISE PROSE AS AN ADJUNCT TO OTHER PROFESSIONAL ACTIVITY. CREDIT IS NOT GIVEN FOR RHET. 133 IN ADDITION TO RHET. 143. PREREQUISITE--RHET. 102 OR EQUIVALENT.
3 HOURS

CONF	E	1-3	M WTH	201	E B	DAVIS

RHET 144 NARRATIVE WRITING.
PRACTICE IN DESCRIPTION, NARRATIVE SKETCHES, STORIES. PREREQUISITE-RHET. 101 AND 102, SOPHOMORE STANDING.
3 HOURS

CONF	E	1-3	TU F	201	E B	FUMENTO
		7-9PM	W	201	E B	

COURSES FOR ADVANCED UNDERGRADUATES

RHET 200 REMEDIAL WRITING.
THIS COURSE CAN NOT BE INCLUDED IN THE THIRTY HOURS OF ADVANCED CREDIT REQUIRED BY THE COLLEGE OF LIBERAL ARTS AND SCIENCES. PREREQUISITE--RHET. 101 AND 102 AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH.
NO CREDIT

LECT-DISC	A	8	MTUWTHF	209	E B	
		7PM	TU	209	E B	
LECT-DISC	B	9	MTUWTHF	205	E B	
		7PM	TU	205	E B	TILLMAN
LECT-DISC	C	10	MTUWTHF	223	E B	
		7PM	TU	223	E B	
LECT-DISC	D	11	MTUWTHF	201	E B	
		7PM	TU	201	E B	

RHET 205 ADVANCED NARRATIVE WRITING. I.
PRACTICE IN THE WRITING OF FICTION, WITH EMPHASIS ON THE SHORT STORY
PREREQUISITE--RHET. 144 OR EQUIVALENT.
3 HOURS

CONF	G	3-5	TU TH	210A	E B	CURLEY
		7-9PM	M	210A	E B	

RHET 255 CREATIVE WRITING.
PERSONAL DIRECTION IN A WRITING PROJECT--FICTION--NOVEL OR SHORT STORIES--DRAMA, POETRY, CRITICISM, NON-FICTION NARRATIVE, ETC. FREQUENCY OF CONFERENCE TO BE DETERMINED BY THE TYPE OF PROJECT. PREREQUISITE--A PREPARATORY COURSE IN ADVANCED WRITING--RHET. 205, 206, 227, 230, SPEECH 263, 363, CONSENT OF INSTRUCTOR. THIS COURSE MAY BE REPEATED FOR CREDIT TO A MAXIMUM OF FOUR HOURS.
2 HOURS

CURLEY, FUMENTO

CONF		ARR				

COURSES FOR GRADUATES

RHET 480 THEORY AND PRACTICE OF ENGLISH COMPOSITION.
AN EXAMINATION OF MODERN PROSE STYLE AND A CONSIDERATION OF PROBLEMS CONFRONTING WRITERS AND TEACHERS OF WRITING AT THE COLLEGE AND HIGH SCHOOL LEVELS.
1/2 UNIT

LAB-DISC	B	9-11	MTU THF	114E	F B	MOAKE

ENGLISH FOR FOREIGN STUDENTS

DEPARTMENT OFFICE 317 E B

NOTE--NO STUDENT IS PERMITTED TO REGISTER FOR ANY COURSE IN ENGLISH A FOREIGN LANGUAGE UNTIL HE HAS TAKEN THE EXAMINATION IN ENGLISH FOR FOREIGN STUDENTS. AUDITORS ARE NOT PERMITTED. RHETORIC 114 AND 115 FULFILL GRADUATION REQUIREMENTS IN RHETORIC. STUDENTS MAY BE REQUIRED TO TAKE MORE ELEMENTARY COURSES BEFORE THEY ARE PERMITTED TO TAKE RHET. 114. ADVISERS SHOULD CONSULT THE UNDERGRADUATE STUDY BULLETIN UNDER THE SECTION ENTITLED--GENERAL REQUIREMENTS FOR GRADUATION-ENGLISH--FOR THE DEFINITION OF A FOREIGN STUDENT.

COURSES FOR UNDERGRADUATES

RHET 109 ENGLISH AS A FOREIGN LANGUAGE.
AN INTENSIVE COURSE IN BASIC ENGLISH STRUCTURE FOR FOREIGN STUDENTS WHO ARE INADEQUATELY PREPARED FOR EITHER RHET. 111 OR 114. MUST BE TAKEN CONCURRENTLY WITH RHET. 110. PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND INSTRUCTIONS.
NO CREDIT

LECT-DISC	A	8-10	MTUWTHFS	119	E B	

RHET 110 ENGLISH AS A FOREIGN LANGUAGE.
A STUDY OF THE SOUNDS AND INTONATION PATTERNS OF AMERICAN ENGLISH AND THE RELATION OF SOUND TO SPELLING. DESIGNED TO IMPROVE THE STUDENTS ABILITY TO SPEAK AND UNDERSTAND ENGLISH AT NORMAL CONVERSATIONAL SPEED. MUST BE TAKEN CONCURRENTLY WITH RHET. 109. MAY ALSO BE TAKEN WITH RHET. 111 OR 114. PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS.
NO CREDIT
LECT-DISC C 10 MTUWTHFS 259 E B

RHET 111 ENGLISH AS A FOREIGN LANGUAGE.
FOR STUDENTS WHO HAVE HAD RHETORIC 109 OR ITS EQUIVALENT IN PREPARATION. A RAPID AND INTENSIVE REVIEW OF BASIC ENGLISH STRUCTURE AND A STUDY OF MORE COMPLICATED SENTENCE PATTERNS WITH PRACTICE IN SIMPLE ORAL AND WRITTEN COMPOSITION. DESIGNED FOR STUDENTS WHO ARE INADEQUATELY PREPARED FOR RHETORIC 114.
PREREQUISITE--RHETORIC 109 AND 110. OR CONSENT OF INSTRUCTOR.
NO CREDIT
LECT-DISC A 8-10 MTUWTHFS 259 E B

RHET 114 ENGLISH AS A FOREIGN LANGUAGE.
ORAL AND WRITTEN COMPOSITION AND READING FOR STUDENTS WHOSE NATIVE LANGUAGE IS NOT ENGLISH. FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT. AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT
PREREQUISITE--RHET. 111 OR CONSENT OF INSTRUCTOR.
0 TO 3 HOURS
LECT-DISC D 11 MTUWTHFS 259 E B

RHET 115 ENGLISH AS A FOREIGN LANGUAGE.
CONTINUATION OF RHET. 114. FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT. AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT RHET. 114 AND 115 FULFILL RHETORIC REQUIREMENTS FOR FOREIGN STUDENTS STUDENTS WHO RECEIVE A GRADE OF C OR D IN RHET. 115 MUST TAKE THE QUALIFYING EXAMINATION IN ENGLISH FOR FOREIGN STUDENTS. THOSE WHO RECEIVE A GRADE OF FAIL ON THIS EXAMINATION MUST TAKE RHET. 2 1.
PREREQUISITE--RHET. 114.
0 TO 3 HOURS
LECT-DISC H 4 MTUWTHFS 119 E B

COURSES FOR GRADUATES

RHET 400 ENGLISH AS A FOREIGN LANGUAGE FOR GRADUATE FOREIGN STUDENTS.
A LANGUAGE LABORATORY COURSE CONCENTRATING ON THE TYPICAL WRITING PROBLEMS THAT A GRADUATE OR RESEARCH STUDENT ENCOUNTERS IN AN AMERICAN UNIVERSITY. PREREQUISITE--GRADUATE STANDING AND RHET. 111. OR CONSENT OF INSTRUCTOR.
3 HOURS. NO GRADUATE CREDIT.
LECT-DISC E 1-3 M W F 119 E B

BUSINESS ENGLISH

DEPARTMENT OFFICE 101 D K H

COURSES FOR UNDERGRADUATES

RHET 151 BUSINESS LETTER WRITING.
STUDY OF THE CORRESPONDENTS PROBLEMS IN BUSINESS AND PRACTICE IN WRITING LETTERS--WITH EMPHASIS ON ORGANIZATION. PERSUASION. AND PRESENTATION FROM THE READERS POINT OF VIEW. FOR THE STUDENT WHOSE CAREER WILL REQUIRE COMPETENCE IN WRITING LETTERS. PREREQUISITES--RHET. 101 AND 102. ALL SECTIONS ARE OPEN TO STUDENTS FROM ANY COLLEGE.
3 HOURS
LECT-DISC D 11 MTUWTHFS 106 D K H MAGUIRE

COURSES FOR ADVANCED UNDERGRADUATES

RHET 272 REPORT WRITING.
THIS COURSE PROVIDES TRAINING AND PRACTICE IN THE WRITTEN INFORMATIVE COMMUNICATIONS--REPORTS AND MEMORANDUMS--REQUIRED IN BUSINESS AND GOVERNMENT. EMPHASIS IS ON ORGANIZATION, CONDENSATION, ADAPTATION TO VARIOUS AUDIENCES, AND USE OF GRAPHIC DEVICES TO SUPPORT THE WRITTEN NARRATIVE. FOR THE STUDENT WHOSE CAREER WILL REQUIRE COMPETENCE IN WRITING REPORTS AND MEMORANDUMS.
PREREQUISITES--RHET. 101, 102, AND 151, OR CONSENT OF CHAIRMAN OF DIVISION. ALL SECTIONS ARE OPEN TO STUDENTS FROM ANY COLLEGE.
2 HOURS

LECT-DISC	B	9	MTUWTH	106	D K H	LORD
LECT-DISC	C	10	MTUWTH	106	D K H	

RURAL SOCIOLOGY

SEE AGRICULTURAL ECONOMICS

RUSSIAN

DEPARTMENT OFFICE 237 L H

MAJOR--TWENTY HOURS OF RUSSIAN EXCLUDING RUSSIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, A MINIMUM OF THREE HOURS IN RUSSIAN 321, 322, 323, 324, AND 332, AND A MINIMUM OF TWO AND A MAXIMUM OF SIX HOURS IN RUSSIAN 309, 310, 312, 331.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH--EXCLUDING RHET. 101 AND 102--, FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, POLITICAL SCIENCE, PORTUGUESE, SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GER. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT SUBJECT. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES--WITH THE EXCEPTION OF COURSES IN RUSSIAN--IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

RUSS 101 FIRST-YEAR RUSSIAN.
FOR STUDENTS WHO HAVE NO CREDIT IN RUSSIAN. NO CREDIT TOWARD GRADUATION IS GIVEN FOR RUSSIAN 101 WITHOUT RUSSIAN 102.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	2-4	MTUWTH	1	G H

RUSS 102 FIRST-YEAR RUSSIAN.
CONTINUATION OF RUSS. 101. PREREQUISITE--RUSS. 101.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	10-12	MTUWTH	227	L H

RUSS 103 SECOND-YEAR RUSSIAN.
PREREQUISITE--RUSSIAN 102 OR EQUIVALENT.
4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	8-10	MTUWTH	120	L H	KLEIN

RUSS 104 SECOND YEAR RUSSIAN.
CONTINUATION OF RUSSIAN 103. PREREQUISITE--RUSSIAN 103.
4 HOURS

LECT-DISC	10-12	MTUWTH	1	G H	SOBOTKA

COURSES FOR ADVANCED UNDERGRADUATES

RUSS 211 ORAL RUSSIAN. I.
PREREQUISITE--RUSSIAN 103 AND 104 OR CONSENT OF INSTRUCTOR.
2 HOURS

LECT-DISC	1	MTUWTH	1	G H	KLEIN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RUSS 321 READINGS IN RUSSIAN LITERATURE.
PUSHKIN. LERMONTOV. GOGOL. REPRESENTATIVE WORKS OF THE PERIOD 1820-1850. HISTORICAL AND CULTURAL BACKGROUNDS. PREREQUISITE--RUSS. 201 AND 202 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 UNIT

LECT-DISC	2-3	MTUWTH	239	L H	SOBOTKA
	3-4	M TH	239	L H	

RUSS 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FRENCH. GERMAN. SPANISH 382. INSTRUCTION AND PRACTICE IN THE TECHNIQUES OF MAKING FOREIGN-LANGUAGE TAPES AND INTEGRATING THEM WITH CLASSROOM ACTIVITY. INSTRUCTION IN THE PROBLEMS OF PLANNING AND OPERATING A LANGUAGE LABORATORY. PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL. OR THE EQUIVALENT.
2 HOURS. OR 1/2 UNIT

LECT-DISC	10	MTUWTH	224	L H	NACHTMANN

COURSES FOR GRADUATES

RUSS 400 BEGINNING RUSSIAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.

LECT-DISC	8-10	MTUWTH	227	L H	THAYER

RUSS 401 READINGS IN RUSSIAN FOR GRADUATE STUDENTS.
PREREQUISITE--RUSSIAN 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.

LECT-DISC	8-10	MTUWTH	1	G H	BILOKUR

RUSS 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN RUSSIAN.
1/4 TO 3 UNITS.

CONF	ARR				STAFF

RUSSIAN LANGUAGE AREA STUDIES

SEE SOCIAL SCIENCES

SAFETY EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

S ED 294 TRAFFIC SAFETY EDUCATION.
PREREQUISITE--S.E. 284 OR CONSENT OF INSTRUCTOR -ALSO ONE FIELD TRIP AND SIX HOURS CLINIC TO BE ARRANGED.
2 HOURS
LECT-DISC 9 MTUWTH 207 HUFF GYM HUFFMAN

COURSES FOR GRADUATES

S ED 402 PROBLEMS IN SAFETY EDUCATION.
1 UNIT
LECT-DISC 8 MTUWTH 209 HUFF GYM FLORIO

SOCIAL SCIENCES

THE DIVISION OF SOCIAL SCIENCES SPONSORS THE FOLLOWING PROGRAMS--A-AN UNDERGRADUATE MAJOR AND MINOR IN LATIN AMERICAN STUDIES. B A GRADUATE MINOR IN LATIN-AMERICAN STUDIES. C-AN UNDERGRADUATE MAJOR AND MINOR IN RUSSIAN AREA STUDIES. D-A GRADUATE MINOR IN RUSSIAN AREA STUDIES. E-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE SOCIAL SCIENCES. F-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE TEACHING OF SOCIAL STUDIES. G-A GRADUATE MAJOR AND MINOR AND UNDERGRADUATE MINOR IN LINGUISTICS.

THE STUDY OF INTERNATIONAL AFFAIRS.--THE DIVISION OF SOCIAL SCIENCES CALLS TO THE ATTENTION OF STUDENTS THE OFFERINGS IN THE GENERAL FIELD OF INTERNATIONAL AFFAIRS FOUND AT THE UNIVERSITY OF ILLINOIS. THE DIVISION RECOMMENDS THAT THE STUDENT INTERESTED IN INTERNATIONAL AFFAIRS CONSULT WITH THE ADVISER IN HIS MAJOR DEPARTMENT CONCERNING THE POSSIBILITY OF TAKING COURSES IN THIS AREA, EITHER AS PART OF A MINOR OR SPLIT MINOR OR AS ELECTIVES.

ENTRANCE EXAMINATIONS FOR THE FOREIGN SERVICE OF THE UNITED STATES.-STUDENTS INTERESTED IN PREPARING FOR THESE EXAMINATIONS ARE URGED TO CONSULT WITH THE GOVERNMENT PLACEMENT CONSULTANT OF THE UNIVERSITY PLACEMENT SYSTEM, WHO MAY BE SEEN AT THE INSTITUTE OF GOVERNMENT AND PUBLIC AFFAIRS, 1201 WEST NEVADA STREET.

LATIN-AMERICAN STUDIES PROGRAM

DEPARTMENT OFFICE 124 D H

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

STUDENTS MAY ELECT THE LATIN-AMERICAN STUDIES PROGRAM AS EITHER A MAJOR OR A MINOR. IN BOTH CASES STUDENTS FOLLOW THE SAME PROGRAM. STUDENTS WHO ELECT LATIN-AMERICAN STUDIES AS A MAJOR OR MINOR SHALL BE REQUIRED TO--

1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE GENERAL CURRICULUM.

2-COMPLETE SIX SEMESTERS OR EQUIVALENT OF COLLEGE SPANISH OR PORTUGUESE. IF A STUDENT WISHES TO TAKE BOTH SPANISH AND PORTUGUESE HE MAY TAKE TWO YEARS OF EACH TO SATISFY THIS REQUIREMENT. IN THE CASE OF WELL-QUALIFIED STUDENTS THE LANGUAGE REQUIREMENT MAY BE MODIFIED.

3-COMPLETE AT LEAST TWENTY SEMESTER HOURS FROM THE COURSES LISTED BELOW, INCLUDING SOC. SCI. 101 AND/OR 102 AND SOC. SCI. 301, CHOSEN FROM AMONG FOUR DEPARTMENTS. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE LATIN-AMERICAN STUDIES PROGRAM MAY NOT BE INCLUDED WITHIN THIS TWENTY HOURS.

AGR. ECON. 211
ANTHROP. 271, 350, 352, 361, 380
ART 318
BIOL. SCI. 100
ECON. 328, 329
GEOG. 231, 332
HIST. 375, 376, 377,
PHIL. 319
POL. SCI. 342, 343
PORTUGUESE 301, 303, 304
SOC. SCI. 101, 102, 301
SOC. 373
SPANISH 202, 303, 304

MINORS--STUDENTS WHO MAJOR IN LATIN-AMERICAN STUDIES MAY ELECT MINORS AS FOLLOWS--TWENTY HOURS, EXCLUDING COURSES TAKEN IN FRESHMAN YEAR, IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN-AGRICULTURAL ECONOMICS, ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, HISTORY OF ART, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH, SOCIAL WORK, AND SOCIOLOGY.

SPLIT MINOR--STUDENTS MAY SPLIT A MINOR BETWEEN LATIN-AMERICAN STUDIES AND ANOTHER DEPARTMENT, BUT MUST MEET THE LANGUAGE REQUIREMENT AND TAKE AT LEAST TWELVE SEMESTER HOURS FROM LATIN-AMERICAN STUDIES, INCLUDING SOC. SCI. 301, AND COURSES FROM AT LEAST TWO DEPARTMENTS IN THE CURRICULUM EXCLUSIVE OF COURSES USED IN THE MAJOR DEPARTMENT.

GRADUATE MINOR IN LATIN-AMERICAN STUDIES

CANDIDATES FOR THE MASTERS DEGREE MUST ELECT A MINIMUM OF TWO UNITS FOR A MINOR IN THIS PROGRAM. DOCTORAL CANDIDATES WHO ELECT LATIN-AMERICAN STUDIES AS A SOLE MINOR MUST EARN A MINIMUM OF FOUR UNITS OF CREDIT IN APPROVED COURSES. FOR A SPLIT MINOR, AT LEAST THREE UNITS OF CREDIT MUST BE EARNED. THE COURSES FOR ALL GRADUATE MINORS IN LATIN-AMERICAN STUDIES MUST BE TAKEN IN AT LEAST TWO DEPARTMENTS OR SUBJECTS AND MUST BE APPROVED BY THE DIRECTOR OF LATIN-AMERICAN STUDIES--PROFESSOR R. L. CARMIN. COURSES IN THE FOLLOWING LIST MAY BE INCLUDED IN THE GRADUATE MINOR.

AGR. ECON. 401
ANTHROP. 350, 352, 361, 380, 490
ART 318, 491
BOT. 300
ECON. 328, 329, 411, 490
GEOG. 332, 495
HIST. 375, 376, 377,
476
PHIL. 319, 483
POL. SCI. 342, 343, 493
PORT. 301, 303, 304, 491
SOC. SCI. 301
SOC. 373, 490
SPAN. 303, 304, 431, 432, 433,
434, 435, 436

STUDENTS IN OTHER COLLEGES

STUDENTS IN TECHNICAL AND PROFESSIONAL COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF LATIN-AMERICAN AFFAIRS, CULTURE, AND LANGUAGES ARE INVITED TO CONSULT WITH MEMBERS OF THE TEACHING STAFF OF THE LATIN-AMERICAN STUDIES PROGRAM, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH A PROGRAM MAY OFTEN BE ADOPTED AS A SPECIAL MINOR UNDER EXISTING REGULATIONS IF THE STUDENT SO DESIRES. IT IS RECOGNIZED THAT THE NUMBER OF ELECTIVE HOURS AVAILABLE FOR SUCH SPECIAL AREA STUDIES VARIES AMONG MANY OF THE EIGHT AND TEN SEMESTER PROGRAMS IN THE UNIVERSITY, BUT MOST STUDENTS WISHING TO INCREASE THEIR PROFICIENCY IN LATIN-AMERICAN AFFAIRS CAN DO SO WITHOUT EXCESSIVE OVERCROWDING OF SCHEDULES. THESE COURSES ARE OF PARTICULAR VALUE TO STUDENTS WHO INTEND TO CARRY ON TECHNICAL OR PROFESSIONAL WORK IN THE LATIN AMERICAN AREA FOR THE GOVERNMENT, PRIVATE BUSINESS, PUBLICATIONS, OR RELIGIOUS ORGANIZATIONS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPAN 304 SURVEY OF SPANISH-AMERICAN LITERATURE.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
SPAN 3 HOURS, OR 1/2 UNIT

LECT-DISC	G	3	MTUWTHF	219	L	H	BROWN
		2	F	219	L	H	BROWN

COURSES FOR GRADUATES

AG EC 401 INTERNATIONAL COMPARATIVE AGRICULTURE.
1 UNIT

LECT-DISC		11	MTUWTH	405	M	H	SCHMIDT

ECON 490 INDIVIDUAL STUDY AND RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT

CONF		ARR	STAFF

POL S 493 RESEARCH IN SELECTED TOPICS.
1 UNIT

CONF		ARR	STAFF

PORT 491 SPECIAL TOPICS IN PORTUGUESE.
1/2 TO 1 UNIT

CONF		ARR	STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
THE TOPIC SELECTED BY THE STUDENT AND THE PROPOSED PLAN OF STUDY MUST BE APPROVED BY THE ADVISER AND THE STAFF MEMBER WHO WILL SUPERVISE THE WORK.
1/2 TO 2 UNITS

CONF		ARR	STAFF

CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES

DEPARTMENT OFFICE 339 L H

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

MAJOR--STUDENTS WHO ELECT RUSSIAN LANGUAGE AND AREA STUDIES AS A MAJOR MUST.
1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE GENERAL CURRICULUM.
2-COMPLETE AT LEAST TWENTY SEMESTER HOURS OF RUSSIAN LANGUAGE COURSES, IN ADDITION TO RUSS. 101-102, OR DEMONSTRATE EQUIVALENT PROFICIENCY.
3-COMPLETE A MAJOR CONSISTING OF AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST FOUR DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE PROGRAM OF RUSSIAN LANGUAGE AND AREA STUDIES MAY NOT COUNT AS PART OF THIS TWENTY HOURS.

ANTHROP. 381, 382	POL. SCI. 335, 383
ECON. 312	RUSSIAN 309, 310, 312, 321, 322,
GEOG. 353	323, 324
HIST. 219, 220, 327, 328,	SOC. 350

4-COMPLETE A MINOR OF TWENTY HOURS, EXCLUDING COURSES OPEN TO FRESHMEN, IN ONE OR TWO DEPARTMENTS. IF TWO ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH. COURSES IN THE RUSSIAN LANGUAGE MAY, WITH THE APPROVAL OF THE CENTER DIRECTOR, CONSTITUTE ALL OR PART OF THIS MINOR.

RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR--A MINOR IN RUSSIAN LANGUAGE AND AREA STUDIES, DESIGNED TO ACCOMPANY A MAJOR IN ANY DEPARTMENT, REQUIRES AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST THREE DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. IT ALSO REQUIRES A KNOWLEDGE OF RUSSIAN EQUIVALENT AT LEAST TO THAT NORMALLY ATTAINED AFTER RUSS. 101-102.

ANTHROP. 381, 382	POL. SCI. 335, 383
ECON. 312	RUSSIAN 309, 310, 312, 321,
GEOG. 353	322, 323, 324
HIST. 219, 220, 327, 328	SOC. 350

GRADUATE MINORS IN RUSSIAN LANGUAGE AND AREA STUDIES

MINOR FOR THE MASTERS DEGREE--A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST EARN AT LEAST TWO UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN BELOW. THE COURSES CHOSEN MUST BE IN AT LEAST TWO DEPARTMENTS

ANTHROP. 381, 382	POL. SCI. 335, 383, 435
ECON. 312	RUSSIAN 309, 310, 312, 321, 322,
GEOG. 353, 495	323, 324, 405, 410, 412, 413, 414
HIST. 327, 328, 419, 420	SOC. 350, 450
LAW 369	

MINOR FOR THE PH.D. DEGREE--A DOCTORAL CANDIDATE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST DEMONSTRATE A READING COMMAND OF RUSSIAN AS TESTED BY EXAMINATION OR BY COMPLETION OF RUSSIAN 401 WITH A GRADE OF A OR B, AND IN ADDITION MUST EARN AT LEAST FOUR UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN JUST ABOVE. THE FOUR UNITS MUST BE DISTRIBUTED AMONG AT LEAST TWO DEPARTMENTS, NOT INCLUDING THE DEPARTMENT OFFERING THE CANDIDATES MAJOR.

CERTIFICATE OF GRADUATE SPECIALIZATION IN RUSSIAN LANGUAGE AND AREA STUDIES

THIS CERTIFICATE IS AWARDED BY THE GRADUATE COLLEGE AND THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES. IT IS FOR PERSONS WITH THE BACCALAUREATE WHO ARE ENROLLED IN ADVANCED STUDIES IN ANY DISCIPLINE AND WHO WISH AT THE SAME TIME TO GAIN A KNOWLEDGE OF THE RUSSIAN AREA AND LANGUAGE. THE REQUIREMENTS ARE--1--A GOOD COMMAND OF WRITTEN AND SPOKEN RUSSIAN, AS DETERMINED BY SPECIAL EXAMINATIONS. 2--AT LEAST SIX GRADUATE UNITS RELATING TO RUSSIA, DISTRIBUTED AMONG AT LEAST THREE OF THE DEPARTMENTS REPRESENTED IN THE PROGRAM--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, LAW, POLITICAL SCIENCE, RUSSIAN AND SOCIOLOGY--IN ADDITION TO THE STUDENTS OWN MAJOR DEPARTMENT. FOR COURSES, SEE ABOVE. 3--A SPECIAL ESSAY BASED LARGELY ON RUSSIAN SOURCES AND TO BE, AT THE MINIMUM, OF THE STANDARD NORMALLY REQUIRED IN A MASTERS THESIS. THE STUDENT MAY SUBMIT, IN FULFILLMENT OF THIS REQUIREMENT, A COPY OF HIS MASTERS THESIS OR DOCTORAL DISSERTATION.

THE ADVISER FOR THE GRADUATE MINORS AND THE CERTIFICATE IS PROFESSOR RALPH T. FISHER, DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES, 339 LINCOLN HALL.

STUDENTS IN OTHER COLLEGES

STUDENTS IN OTHER COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO DESIRE A KNOWLEDGE OF THE RUSSIAN AREA ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH PROGRAMS MAY IN SOME CASES BE ADOPTED AS A SPECIAL MINOR.

FOR DESCRIPTIONS OF COURSES IN THE RUSSIAN LANGUAGE, INCLUDING THE INTENSIVE INTRODUCTORY COURSE, CONSULT THE TIME TABLE SECTION DEVOTED TO THE DEPARTMENT OF RUSSIAN. THE CONSENT OF INSTRUCTOR, WHICH IS MENTIONED FOR THE COURSES BELOW MAY BE OBTAINED FROM DR. FISHER FOR STUDENTS ENROLLED IN RUSSIAN LANGUAGE AND AREA STUDIES AS MAJORS OR MINORS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOG 353 GEOGRAPHY OF THE USSR.
PHYSICAL AND CULTURAL REGIONALISM--A SURVEY OF NATURAL RESOURCES AND PATTERNS OF HUMAN OCCUPANCE INCLUDING INDUSTRY, AGRICULTURE, AND TRANSPORTATION. PREREQUISITE--EIGHT HOURS OF GEOGRAPHY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	9	MTUWTH	113	D	H	FELLMANN
	1-3	TU	113	D	H	FELLMANN

RUSS 321 READINGS IN RUSSIAN LITERATURE.
PUSHKIN, LEBMONTOV, GOGOL. PREREQUISITE--RUSS. 201 AND 202 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

LECT-DISC	2-3	MTUWTH	239	L	H
	3-4	M TH	239	L	H

COURSES FOR GRADUATES

HIST 419 SEMINAR IN MODERN RUSSIAN HISTORY.
1 UNIT

	ARR	FELLMANN

SOCIAL WORK

DEPARTMENT OFFICE 1204 W OREGON

MINORS--COURSES IN SOCIAL WORK MAY BE COUNTED TOWARD AN UNDERGRADUATE MINOR IN THE DEPARTMENTS OF ANTHROPOLOGY, ECONOMICS, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOC W 311 INTRODUCTION TO SOCIAL CASEWORK.
THE BEHAVIOR AND ATTITUDE EXPRESSED BY PERSONS ASKING FOR ASSISTANCE, THE FEELINGS THUS ENGENDERED, AND THE EFFECTS OF ALL OF THESE ON THE CONTACTS OF SOCIAL CASEWORKERS WITH INDIVIDUALS AND FAMILIES. ATTENTION IS GIVEN TO CASE RECORDS SELECTED FROM SOCIAL CASEWORK PRACTICE IN PUBLIC ASSISTANCE AND OTHER COMMUNITY AGENCIES. PREREQUISITE--JUNIOR STANDING.
2 HOURS, OR 1/2 UNIT
10 MTUWTH 1205 W OREGON MCDONALD

SOC W 316 SOCIAL SERVICES FOR CHILDREN.
UNMET NEEDS OF CHILDREN AND THE ORGANIZATION OF SOCIAL SERVICES TO MEET THOSE NEEDS. RESPONSIBILITIES OF VOLUNTARY AS WELL AS PUBLIC AGENCIES ARE CONSIDERED. SURVEY OF AGENCIES PROVIDING LEADERSHIP AND STANDARD SETTING IN SOCIAL SERVICES FOR CHILDREN.
PREREQUISITE--JUNIOR STANDING AND A MAJOR IN ANY OF THE SOCIAL SCIENCES, EDUCATION, RECREATION, SPEECH CORRECTION, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
11 MTUWTHFS 1205 W OREGON COSTIN

SOCIOLOGY

DEPARTMENT OFFICE 342 L H

MAJOR--TWENTY HOURS FROM ANY COURSES IN SOCIOLOGY, EXCLUDING SOCIOL. 100, 104, AND 105. SOCIOLOGY MAJORS ARE STRONGLY ADVISED TO TAKE AT LEAST ONE COURSE IN EACH OF THE FOLLOWING FIELDS--GENERAL SOCIOLOGICAL THEORY--SOC. 221--SOCIETY AND THE INDIVIDUAL--SOC. 212 AND 320--AND SOCIOLOGICAL RESEARCH METHODS--SOC. 385 AND 386. SOC. 185, OR AN EQUIVALENT, IS REQUIRED FOR SOCIOLOGY MAJORS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, HISTORY, LAW, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIAL WORK. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.

DEPARTMENTAL DISTINCTION--IN ORDER TO BE AWARDED DISTINCTION IN SOCIOLOGY AT GRADUATION, THE STUDENT MUST 1 -HAVE AT LEAST A 4.0 ALL UNIVERSITY GRADE POINT AVERAGE, 2 - MEET THE GENERAL REQUIREMENTS FOR A MAJOR IN SOCIOLOGY, AND , 3-IN ADDITION TO THE WORK DONE FOR THE MAJOR EARN FOUR SEMESTER HOURS OF CREDIT BY ENROLLING IN ONE OR BOTH OF THE HONORS COURSES--SOC. 290-291.

COURSES FOR UNDERGRADUATES

SOC 185 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS.
SAME AS GEOG. 185, AND ANTH. 185. EMPHASIS IS GIVEN TO APPLICATION OF STATISTICAL METHODS IN SOCIAL SCIENCE. TOPICS INCLUDE DISCUSSION OF RESEARCH DESIGN AND THE ROLE OF STATISTICS IN SOCIOLOGICAL INVESTIGATION, MEASURES OF CENTRAL TENDENCY AND DISPERSION, SIMPLE CORRELATION TECHNIQUES, CONTINGENCY ANALYSIS, INTERPRETATION OF SURVEY FINDINGS, AND INTRODUCTION TO STATISTICAL INFERENCE.
PREREQUISITE--SOC. 100 OR CONSENT OF INSTRUCTOR OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS
LECT-DISC A 10-1130 MTUWTH 314 L H LAZERWITZ

COURSES FOR ADVANCED UNDERGRADUATES

SOC 225 RACIAL AND CULTURAL MINORITIES.
PREREQUISITE--SOCIOL. 100, OR 104 AND 105, OR D G S 151 AND 152, JUNIOR STANDING.
3 HOURS

LECT-DISC	A	1-230	MTUWTH	326	L H	LAZERWITZ

SOC 231 ANALYSIS OF JUVENILE DELINQUENCY.
CONCEPTIONS OF DELINQUENCY AND ITS CAUSATION, THE JUVENILE DETENTION, TREATMENT OF JUVENILE OFFENDERS, DELINQUENCY PREVENTION PROGRAMS. PREREQUISITE--SOC. 100 OR SOC. 104 AND 105 OR D.G.S. 151 AND 152.
3 HOURS.

LECT-DISC	A	10	MTUWTHF	326	L H	CLARK
		11	W	326	L H	

SOC 277 RURAL SOCIAL PROBLEMS.
SAME AS RURAL SOCIOL. 277. PREREQUISITE--THREE HOURS OF SOCIOLOGY OR SIX HOURS OF SOCIAL SCIENCE, OR CONSENT OF INSTRUCTOR. FIELD TRIP REQUIRED, ESTIMATED EXPENSE, $5.
3 HOURS

LECT-DISC		11	MTUWTHF	316S	M H	LATHROPE
		12	TU	316S	M H	

SOC 290 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF	ARR		STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOC 300 SOCIAL SYSTEMS AND INSTITUTIONS.
AN ADVANCED DISCUSSION OF GENERAL PRINCIPLES AND CONCEPTS IN SOCIOLOGY, AMONG THE TOPICS DISCUSSED ARE CULTURE, SOCIAL STRUCTURE, SOCIALIZATION, PRIMARY GROUPS, SOCIAL STRATIFICATION, THEIR APPLICATION TO PROBLEMS IN POLITICAL SOCIOLOGY, INDUSTRIALIZATION, RACE RELATIONS, RELIGION, AND DELINQUENCY, THE BEARING OF THESE UPON LARGER PROBLEMS OF SOCIAL ORDER AND SOCIAL CHANGE. DESIGNED FOR ADVANCED UNDERGRADUATE MAJORS IN SOCIOLOGY AND OTHER SOCIAL SCIENCES AND FOR GRADUATE STUDENTS IN SOCIOLOGY WITHOUT ADEQUATE PREPARATION FOR GRADUATE WORK. PREREQUISITE--SOC. 100, OR 8 HOURS IN SOCIAL SCIENCE, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	A	1-3	M W F	303B	L H	BERGER

SOC 331 CRIMINOLOGY.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D. G. S. 151 AND 152, JUNIOR STANDING, PRELEGAL JUNIORS MAY BE ADMITTED WITH CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	A	8	MTUWTHF	326	L H	CLARK
		9	TU	326	L H	

COURSES FOR GRADUATES

SOC 432 CRITIQUE OF RESEARCH IN JUVENILE DELINQUENCY.
PREREQUISITE--SOCIOL. 331 OR CONSENT OF INSTRUCTOR. SOCIOL. 431 IS RECOMMENDED.
1 UNIT

LECT-DISC	A	3-5	TU TH	303B	L H	BERGER

SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS RURAL SOC. 487. PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT

CONF	ARR		STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
THE TOPIC SELECTED BY THE STUDENT AND THE PROPOSED PLAN OF STUDY MUST BE APPROVED BY THE ADVISER AND THE STAFF MEMBER WHO WILL SUPERVISE THE WORK.
1/2 TO 2 UNITS
CONF ARR STAFF

SOC 499 THESIS RESEARCH.
SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

SPANISH

DEPARTMENT OFFICE 218 L H

MAJOR--TWENTY HOURS IN SPANISH, EXCLUDING SPANISH 101, 102, 103, 113 AND 114, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. EITHER LING. 300, INTRODUCTION TO LINGUISTICS, OR LING. 302, COMPARATIVE LINGUISTICS MAY BE COUNTED TOWARD THE MAJOR IN SPANISH. EITHER SOC.SCI. 101 OR 102, LATIN-AMERICAN CIVILIZATION, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH AND IS REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN, EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LATIN-AMERICAN STUDIES, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, AND RUSSIAN.

COURSES FOR UNDERGRADUATES

SPAN 101 ELEMENTARY SPANISH.
FOR STUDENTS WHO HAVE NO CREDIT IN SPANISH. NO CREDIT TOWARD GRADUATION IS GIVEN FOR SPANISH 101 WITHOUT SPANISH 102.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL.
LECT-DISC C 10-12 MTUWTH 108 L H TESTA

SPAN 102 ELEMENTARY SPANISH.
CONTINUATION OF SPANISH 101. PREREQUISITE--SPANISH 101 OR ONE YEAR OF HIGH SCHOOL SPANISH.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL
LECT-DISC A 8-10 MTUWTH 133 L H PIETRANGELI

SPAN 103 INTERMEDIATE SPANISH.
PREREQUISITE--SPANISH 102 OR TWO YEARS OF HIGH SCHOOL SPANISH.
4 HOURS
LECT-DISC C 10-12 MTUWTH 133 L H TRIWEDI

SPAN 104 INTERMEDIATE SPANISH.
CONTINUATION OF SPAN. 103. PREREQUISITE--SPAN. 103 OR THREE YEARS OF HIGH SCHOOL SPANISH.
4 HOURS
LECT-DISC E 1-3 MTUWTH 133 L H BRAUN

COURSES FOR ADVANCED UNDERGRADUATES

SPAN 211 INTERMEDIATE COMPOSITION AND CONVERSATION.
PREREQUISITE--SPANISH 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
3 HOURS

LECT-DISC	E	1	MTUWTHF	219	L	H	
	E	2	F	133	L	H	

SPAN 212 INTERMEDIATE COMPOSITION AND CONVERSATION.
CONTINUATION OF SPAN. 211. PREREQUISITE--SPAN. 211 OR EQUIVALENT. REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
3 HOURS

LECT-DISC	E	1	MTUWTHF	219	L	H	
	E	2	F	133	L	H	

SPAN 213 ADVANCED COMPOSITION AND CONVERSATION.
PREREQUISITE--SPANISH 212 OR EQUIVALENT.
3 HOURS

LECT-DISC	E	1	MTUWTHF	219	L	H	
	E	2	F	133	L	H	

SPAN 214 ADVANCED COMPOSITION AND CONVERSATION.
PREREQUISITE--SPANISH 213 OR EQUIVALENT.
3 HOURS

LECT-DISC	E	1	MTUWTHF	219	L	H	TESTA
	E	2	F	133	L	H	

SPAN 291 SENIOR THESIS.
FOR CANDIDATES FOR HONORS IN SPANISH.
2 HOURS

		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPAN 304 SURVEY OF SPANISH-AMERICAN LITERATURE.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
3 HOURS. OR 1/2 UNIT

LECT-DISC	G	3	MTUWTHF	219	L	H	BRAUN
	G	2	F	219	L	H	

SPAN 331 LA CULTURA HISPANICA--ESPANA.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH. PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	8	MTUWTH	224	L	H	TRIWEDI

SPAN 351 PHONETICS.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
2 HOURS. OR 1/2 UNIT

LECT-DISC	F	2	MTUWTH	219	L	H	FLORES

SPAN 352 SYNTAX.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
2 HOURS. OR 1/2 UNIT

LECT-DISC	B	9	MTUWTH	219	L	H	SHOEMAKER

SPAN 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FRENCH. GERMAN. RUSS. 382. INSTRUCTION AND PRACTICE IN THE TECHNIQUES OF MAKING FOREIGN-LANGUAGE TAPES AND INTEGRATING THEM WITH CLASSROOM ACTIVITY. INSTRUCTION IN THE PROBLEMS OF PLANNING AND OPERATING A LANGUAGE LABORATORY.
PREREQUISITE--3 YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL. OR THE EQUIVALENT.
2 HOURS. OR 1/2 UNIT

LECT-DISC	C	10	MTUWTH	224	L	H	NACHTMANN

COURSES FOR GRADUATES

SPAN 422 CONTEMPORARY SPANISH NOVEL AND ESSAY.
1 UNIT

LECT-DISC	11	MTUWTH	219	L H		SHOEMAKER

SPAN 426 SPANISH POETRY OF THE NINETEENTH AND TWENTIETH CENTURIES.
1 UNIT

LECT-DISC	4	MTUWTH	219	L H		PIETRANGELI

SPAN 491 SPECIAL TOPICS IN SPANISH.
1/2 TO 1 UNIT

	ARR					STAFF

SPAN 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER--0 TO 2 1/2 UNITS

	ARR					SHOEMAKER

SPEECH AND THEATRE

DEPARTMENT OFFICE 204A L H

MAJOR--TWENTY HOURS IN SPEECH IN ADDITION TO SPCH. 101, 105, AND 141. AT LEAST FIVE OF THE TWENTY HOURS MUST BE IN COURSES NUMBERED 300 OR HIGHER. SPCH. 301 MUST BE INCLUDED. IN DECLARING A MAJOR IN SPEECH THE STUDENT MAY CHOOSE ONE OF THESE AREAS FOR EMPHASIS--GENERAL SPEECH, PUBLIC ADDRESS, INTERPRETATION, THEATRE, SPEECH SCIENCE AND PHONETICS, SPEECH CORRECTION AND AUDIOLOGY. THE STUDENT SHOULD REPORT TO 204A LINCOLN HALL TO BE ASSIGNED AN AREA ADVISER WITH WHOM HE MAY CONFER CONCERNING REQUIRED AND RECOMMENDED COURSES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED WITH THE APPROVAL OF THE STUDENTS MAJOR ADVISER AND HIS DEPARTMENT HEAD. IF TWO MINOR SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE INCLUDED IN EACH.

TWO TEACHER-TRAINING CURRICULA ARE OFFERED IN SPEECH. SEE THE CURRICULUM PREPARATORY TO SPEECH CORRECTION WORK AND THE CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH.

COURSES FOR UNDERGRADUATES

SPCH 101 PRINCIPLES OF EFFECTIVE SPEAKING.
PREPARATION AND PRESENTATION OF SHORT INFORMATIVE AND PERSUASIVE SPEECHES, WITH EMPHASIS ON THE SELECTION AND ORGANIZATION OF MATERIAL, METHODS OF SECURING INTEREST AND ATTENTION, AND THE ELEMENTS OF DELIVERY.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8-10	M W F	136	L H		OLSON
LECT-DISC	B	9	MTUWTH	304	L H		DIETER
		9-11	F	304	L H		
LECT-DISC	C	10-12	M	142	L H		HALL
		10	TUWTHF	142	L H		

SPCH 113 GROUP DISCUSSION AND CONFERENCE LEADERSHIP.
STUDY OF LEADERSHIP, GROUP PROCESS, AND INTERPERSONAL RELATIONS IN THE SMALL GROUP, CONFERENCE, AND THE PUBLIC FORUM, WITH EMPHASIS ON PRACTICE IN LEADING AND PARTICIPATION IN VARIOUS TYPES OF PUBLIC DISCUSSION AND CONFERENCE, WITH MATERIALS DRAWN FROM CURRENT PUBLIC QUESTIONS. PREREQUISITE--SOPHOMORE STANDING. BY PERMISSION OF THE HEAD OF THE DEPARTMENT THE PREREQUISITE MAY BE WAIVED FOR SUPERIOR STUDENTS--INCLUDING JAMES SCHOLARS.
3 HOURS

LECT-DISC	E	1-3	M W F	262	ARMORY		GULLEY

SPCH 141 ORAL INTERPRETATION.
ORAL READING FOR UNDERSTANDING, APPRECIATION, AND COMMUNICATION.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
*ONE HOUR TO BE ARRANGED

LECT-DISC	B	*9	MTUWTHF	142 L H	SLOAN

COURSES FOR ADVANCED UNDERGRADUATES

SPCH 291 HONORS COURSE.
INDIVIDUAL STUDY LEADING EITHER TO A THESIS OR TO A COMPREHENSIVE EXAMINATION FOR HONORS IN THE DEPARTMENT OF SPEECH AND THEATRE. THIS COURSE MAY BE REPEATED FOR A MAXIMUM OF FOUR HOURS CREDIT. PREREQUISITE--SENIOR STANDING, A GRADE-POINT AVERAGE OF 4.0 OR CONSENT OF HEAD OF DEPARTMENT.
2 HOURS

CONF		ARR		STAFF

SPCH 293 INDIVIDUAL TOPICS.
INDIVIDUAL INVESTIGATION OF SPECIAL PROBLEMS. THIS COURSE MAY BE REPEATED FOR A MAXIMUM OF FOUR HOURS CREDIT. PREREQUISITE--TEN HOURS OF SPEECH, GRADE-POINT AVERAGE OF 3.75, CONSENT OF HEAD OF DEPARTMENT.
2 HOURS

CONF		ARR		STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPCH 301 INTRODUCTION TO PHONETICS.
SAME AS LINGUISTICS 301. BASIC PRINCIPLES OF PHONETIC STUDY, INCLUDING OBSERVATION AND REPRESENTATION OF PRONUNCIATIONS, EAR TRAINING, PRACTICE IN TRANSCRIPTION. PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	C	10	MTUWTH	136 L H	WOOLLEY
		3	TU TH	221 G H	

SPCH 312 AMERICAN PUBLIC ADDRESS.
STUDY OF REPRESENTATIVE AMERICAN SPEECHES FROM THE SIXTEENTH CENTURY TO THE PRESENT.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	B	9	MTUWTH	148 L H	BROADRICK
		3-5	W	148 L H	

SPCH 342 ORAL INTERPRETATION OF POETRY.
ANALYSIS AND ORAL PRESENTATION OF LITERATURE REPRESENTATIVE OF VARIOUS POETIC FORMS. PREREQUISITE--SPCH. 141.
3 HOURS, OR 1/2 TO 1 UNIT
*ONE HOUR TO BE ARRANGED

LECT-DISC	B	*9	MTUWTHF	128 L H	NELSON

SPCH 353 CREATIVE DRAMATICS FOR CHILDREN.
A STUDY OF THE SUBJECT MATTER AND TECHNIQUES OF CREATIVE DRAMATICS FOR CHILDREN, WITH LABORATORY APPLICATION. PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT

LECT-DISC	E	1-3	M W F	112 G H	MCMILLEN

SPCH 383 DEVELOPMENT OF SPOKEN LANGUAGE.
PREREQUISITE--SENIOR STANDING AND CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED

LECT-DISC		*11	MTUWTHF	106 SP CLINIC	BENNETT

SPCH 385 SPEECH CORRECTION.
STUDY OF THE CAUSES, SYMPTOMS, AND TREATMENT OF SPEECH DISORDERS, INCLUDING ARTICULATORY, VOCAL, AND RHYTHMICAL DISORDERS. OBSERVATION AND PRACTICE IN CLINICAL TECHNIQUES ARE PROVIDED IN THE LABORATORY. PREREQUISITE--TEN HOURS OF SPEECH OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1/2 UNIT

LECT-DISC	A	8-10	TUWTHF	106 SP CLINIC	ONEILL

SPCH 396 DIFFERENTIAL DIAGNOSIS OF HEARING DISORDERS IN YOUNG CHILDREN.
SPECIAL TESTS AND PROCEDURES FOR THE MEASUREMENT OF RESIDUAL HEARING IN YOUNG CHILDREN. THE EFFECTS OF COMPLEX PERIPHERAL AND CENTRAL AUDITORY DYSFUNCTIONS ON COMMUNICATION TRAINING. THE USE OF NONWEARABLE AMPLIFIERS WITH YOUNG CHILDREN. PRACTICE IN CLINICAL TECHNIQUES. PREREQUISITE--SPCH. 391. 395. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 TO 1 UNIT

LECT-DISC	ARR				BYERS

COURSES FOR GRADUATES

SPCH 403 SEMINAR FOR TEACHERS OF SPEECH.
INVESTIGATIONS OF CURRENT PRINCIPLES. MATERIALS. AND DEVELOPMENTS IN THE FIELD OF SPEECH AND OF THEIR RELATIONSHIP TO THE TEACHER.
1 UNIT

LECT-DISC	ARR				BURNS

SPCH 423 THE RHETORIC OF ARISTOTLE.
STUDY OF THE RHETORIC IN RELATION TO OTHER WORKS OF ARISTOTLE.
1 UNIT

LECT-DISC	ARR				NADEAU

SPCH 451 PROBLEMS IN PLAY DIRECTING IN THE EDUCATIONAL THEATRE.
STUDY OF THE AUDIENCE. PLAY SELECTION. THE ACTORS ABILITIES AND NEEDS. TRY-OUTS AND CASTING. CONDUCT OF REHEARSALS AND METHODS OF DIRECTING THE DRAMATIC CLUB. CONTESTS AND FESTIVALS.
1 UNIT

LECT-DISC	10-12	TU TH	206A L H		HEWITT

SPCH 468 SEMINAR IN THEATRE HISTORY.
STUDIES IN THE HISTORY OF THE THEATRE.
1 TO 2 UNITS

LECT-DISC	ARR				TRAPIDO

SPCH 486 ADVANCED CLINICAL TECHNIQUES IN SPEECH AND HEARING.
PRACTICE OF ADVANCED CLINICAL THERAPY FOR SPEECH AND HEARING DISORDERS. SEMI-INDEPENDENT MANAGEMENT OF COMPLEX DIFFICULT CASES. PARTICIPATION IN EXAMINATION AND ANALYSIS. PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 4 UNITS

CONF	ARR				CURRY. ONEILL. BYERS

SPCH 489 SEMINAR IN ORGANIC SPEECH DISORDERS.
PRINCIPLES AND METHODS OF CLINICAL AND CLASSROOM CORRECTION OF SPEECH DISORDERS ASSOCIATED WITH THE ORGANIC DYSFUNCTIONS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	ARR				NELSON

SPCH 495 SPECIAL PROBLEMS.
INDIVIDUAL INVESTIGATION OF SPECIAL PROJECTS NOT INCLUDED IN THESES. OPEN TO MASTERS CANDIDATES FOR ONE UNIT. TO DOCTORS CANDIDATES FOR ONE OR TWO UNITS. PREREQUISITE--CONSENT OF THE HEAD OF THE DEPARTMENT.
1 TO 2 UNITS

CONF	ARR				STAFF

SPCH 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR				CURRY. DIETER. FAIRBANKS. GULLEY. HULTZEN MURPHY. NADEAU. NELSON. NICHOLS ONEILL. SCOTT. SHATTUCK. SWANSON. WALLACE. WINDESHEIM

THEORETICAL AND APPLIED MECHANICS

DEPARTMENT OFFICE 212 T L

COURSES FOR UNDERGRADUATES

T A M 150 ANALYTICAL MECHANICS--STATICS.
PREREQUISITE--PHYSICS 101 OR 106. REGISTRATION IN MATH. 142 OR MATH. 143.
2 HOURS
LECT-DISC E 8 MTU THF 313 T L

COURSES FOR ADVANCED UNDERGRADUATES

T A M 211 ANALYTICAL MECHANICS--DYNAMICS.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR MATH. 143.
3 HOURS
LECT-DISC E 9 MTUWTHFS 306B T L

T A M 221 ELEMENTARY MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR MATH. 143.
3 HOURS
LECT-DISC P 10 MTUWTHFS 306B T L

T A M 223 MECHANICAL BEHAVIOR OF SOLIDS.
PREREQUISITE--REGISTRATION IN T.A.M. 221.
1 HOUR
LAB P 3-5 M W 225 T L

T A M 232 FLUID MECHANICS.
PREREQUISITE--T A M 211.
3 HOURS
LECT-DISC E 9 MTUWTHFS 310 T L

T A M 234 FLUID MECHANICS LABORATORY.
PREREQUISITE--REGISTRATION IN T A M 232.
1 HOUR
LAB E 3-5 TU TH 126 T L

T A M 311 MECHANICAL VIBRATIONS.
PREREQUISITE--T A M 154 OR 156 OR 211 AND 221.
3 HOURS. OR 1/2 TO 1 UNIT
LECT-DISC Z 11 MTUWTHFS 306B T L

T A M 321 ADVANCED MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 221 AND 223 OR 224.
3 HOURS. OR 1/2 TO 1 UNIT
LECT-DISC Z 8 MTUWTHFS 306B T L

T A M 326 EXPERIMENTAL STRESS ANALYSIS.
PREREQUISITE--T.A.M. 150. 211. 221. AND 223 OR 224. T.A.M. 321 IS DESIRABLE.
3 HOURS. OR 1/2 TO 1 UNIT
LAB-DISC Z 10-12 MTU THF 302C T L

T A M 346 DIMENSIONAL ANALYSIS AND THEORY OF MODELS.
LECT-DISC Z 9 MTUWTHFS 313 T L

COURSES FOR GRADUATES

T A M 441 APPLIED ANALYSIS IN ENGINEERING.
PREREQUISITE--MATH 143. MATH 343 AND 345 ARE RECOMMENDED.
1 UNIT
LECT-DISC 10 MTUWTHFS 310 T L

T A M 493 ADVANCED INDEPENDENT STUDY--SPECIAL PROBLEMS.
1/2 TO 2 UNITS
ARR

T A M 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
ARR

VETERINARY MEDICAL SCIENCE

DEPARTMENT OFFICE 131 V M

COURSES FOR GRADUATES

V M S 417 MEDICAL MYCOLOGY.
STUDY OF THE FUNGI THAT CAUSE INFECTIONS IN MAN AND ANIMALS--
TAXONOMY. METHODOLOGY. EPIDEMIOLOGY. PATHOLOGY. AND DIAGNOSIS.
PREREQUISITE--MCBIO. 326. V.M.S. 323. OR EQUIVALENT.
1 UNIT
ARR RHOADES
WATRACH

V M S 450 ADVANCED VETERINARY PATHOLOGY.
ADVANCED STUDY OF GROSS AND MICROSCOPIC PATHOLOGY OF DISEASES
OF DOMESTIC ANIMALS. PREREQUISITE--V.M.S. 326 OR EQUIVALENT.
1 UNIT
ARR SIMON

V M S 459 ADVANCED CORRELATIVE PATHOLOGY.
PREREQUISITE--V.M.S. 326. 361. 445. 450 OR
EQUIVALENT. CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
ARR SIMON. WATRACH

V M S 492 SPECIAL PROBLEMS.
BASIC AND APPLIED STUDY INCLUDING ORIENTATION AND RESEARCH ON
PERTINENT INITIAL AND CONTINUING PROBLEMS IN THE STUDENTS AREA OF
INTEREST. PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT
ARR STAFF

V M S 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
ARR STAFF

DEPARTMENT OFFICE 345 N H

MAJOR--TWENTY HOURS IN ZOOLOGY, EXCLUDING ZOOL. 101, 104, 106, AND BIOL. SCI. 100, AND INCLUDING FIVE HOURS OF ADVANCED WORK. ONE YEAR OF PHYSICS AND ONE YEAR OF CHEMISTRY IS REQUIRED OF ALL ZOOLOGY MAJORS. THE COURSES TAKEN IN PHYSICS AND CHEMISTRY MAY BE APPLIED TOWARD A MINOR IN EITHER OF THESE FIELDS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANIMAL SCIENCE, TO BE CHOSEN FROM COURSES 100, 110, 230, 305 OR 330, ANTHROPOLOGY, BOTANY, CHEMISTRY, EDUCATION, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, MATHEMATICS,MICROBIOLOGY, PHYSICS, PHYSIOLOGY, AND PSYCHOLOGY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 131 AND 132 MAY BE SUBSTITUTED FOR ZOOL. 101 OR 104 WHEREVER EITHER OF THE LATTER CONSTITUTES A PREREQUISITE.

ZOOL 101 GENERAL ZOOLOGY.
THIS COURSE IS DESIGNED AND RECOMMENDED FOR ZOOLOGY MAJORS AND TO SATISFY PART OF THE REQUIREMENTS FOR PREMEDICAL AND OTHER PREPROFESSIONAL STUDENTS. ONE FIELD TRIP IS INCLUDED.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT	8	MTUWTH	241	N H B	UNDERHILL, MOLL
LAB-DISC	9-12	MTUWTH	313	N H B	PARRACK

ZOOL 104 ELEMENTARY ZOOLOGY.
FUNDAMENTAL PRINCIPLES OF THE STRUCTURE, PHYSIOLOGY, REPRODUCTION, ECOLOGY, AND EVOLUTION OF ANIMALS, WITH SPECIAL EMPHASIS ON THEIR RELATIONS TO HUMAN LIFE. THIS COURSE AND BOT. 100 MEET THE GENERAL EDUCATION REQUIREMENT IN BIOLOGICAL SCIENCE IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES AND THE ZOOLOGY REQUIREMENT FOR STUDENTS IN AGRICULTURE.
*STUDENTS WITH 95 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT	8	MTUWTH	241	N H B	UNDERHILL,
LAB-DISC	9-12	MTUWTH	315	N H B	MOLL, PARRACK

ZOOL 132 COMPARATIVE VERTEBRATE ANATOMY.
PREREQUISITE--ZOOL. 101 OR ONE YEAR OF GENERAL BIOLOGY--SUCH AS BIOLOGICAL SCIENCE OR THE BOTANY-ZOOLOGY SEQUENCE, A GRADE OF C IN ZOOL. 101 IS REQUIRED OF FRESHMEN.
5 HOURS

LECT	8	MTUWTHF	136	BUR HALL	BARLOW
QUIZ	9	F	136	BUR HALL	
LAB	9-12	MTUWTH	330	N H B	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ZOOL 301 GENERAL PHYSIOLOGY.
SAME AS PHYSIOLOGY 301. A CONSIDERATION FROM THE STANDPOINT OF EXPERIMENTAL BIOLOGY OF FUNCTIONS THAT ARE COMMON TO MOST LIVING ORGANISMS. PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHF	140	BUR HALL
LAB	9-12	MTU	523	BUR HALL
LAB	10-12	W	523	BUR HALL
DISC	9	W	523	BUR HALL

ZOOL 303 INDIVIDUAL TOPICS.
FOR THOSE WHO WISH TO STUDY INDIVIDUAL PROBLEMS. CANDIDATES FOR HONORS AND UNDERGRADUATES WHO ARE ENROLLED FOR TUTORIAL WORK OR IN INDIVIDUAL CURRICULA SHOULD REGISTER IN THIS COURSE. GRADUATES MAY REGISTER FOR TOPICS INVOLVING INDIVIDUAL WORK NOT ASSIGNED IN OTHER COURSES. PREREQUISITE--TWO YEARS OF ZOOLOGY, SENIOR STANDING, APPROVAL OF DEPARTMENT.
2 TO 5 HOURS, OR 1/2 TO 1 UNIT
ARR STAFF

ZOOL 330 PRACTICAL MICROTECHNIQUE.
AN INTRODUCTION TO MICROSCOPY, MICROPHOTOGRAPHY AND HISTOLOGICAL TECHNIQUE. PREREQUISITE--ONE YEAR OF BIOLOGY.
3 HOURS, OR 1/2 UNIT

LAB-DISC	8-11	MTUWTH	326	N H B	BIRGE

ZOOL 340 NATURAL HISTORY OF THE VERTEBRATES.
PREREQUISITE--ONE YEAR OF BIOLOGY, INCLUDING ZOOL. 101 OR 104.
5 HOURS, OR 1 UNIT

LECT	1	MTUWTH	102C	VIVARIUM	SHOEMAKER
LAB	1-5	F	102B	VIVARIUM	
LAB	8-12	FS	102B	VIVARIUM	

COURSES FOR GRADUATES

ZOOL 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ANIMAL SCIENCE 408. PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
ARR NALBANDOV

ZOOL 499 THESIS RESEARCH.
*MAY BE TAKEN BY STUDENTS WHO CAN ATTEND CLASSES ONLY ON SATURDAYS.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF VERTEBRATES--	
VERTEBRATE ANATOMY	BADER, SMITH, BOCK
ENDOCRINOLOGY	HALL, NALBANDOV
HISTOLOGY	ADAMSTONE
ULTRASTRUCTURE	HALL
FUNCTIONAL ANATOMY	BOCK
VERTEBRATE PHYSIOLOGY	PROSSER
ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF INVERTEBRATES--	
HELMINTHOLOGY	KRUIDENIER
INVERTEBRATE ZOOLOGY	GREENBERG, MATTESON
INVERTEBRATE PHYSIOLOGY	PROSSER
PARASITOLOGY	KRUIDENIER
PROTOZOOLOGY	CORLISS
EMBRYOLOGY AND BASIC KNOWLEDGE OF CELLS AND TISSUES--	
CYTOLOGY	ADAMSTONE, BIRGE, ROSLANSKY
EMBRYOLOGY AND REGENERATION	WATTERSON
TOXICOLOGY	INGLE
PRINCIPLES OF ECOLOGY, PRINCIPLES OF TAXONOMY, NATURAL HISTORY--	
ECOLOGY	KENDEIGH
ETHOLOGY	BARLOW
HERPETOLOGY	SMITH
ICHTHYOLOGY	SHOEMAKER
LIMNOLOGY	MATTESON
MAMMALOGY	HOFFMEISTER
ORNITHOLOGY	KENDEIGH, BOCK
WILDLIFE MANAGEMENT	KENDEIGH, SHOEMAKER
GENETICS, PHYLOGENY, EVOLUTION--	
GENETICS AND EVOLUTION	KITZMILLER, LUCE, NANNEY
VERTEBRATE PHYLOGENY & PALEONTOLOGY	BADER

ARR STAFF

TRIAL REGISTRATION FORM

Date.....

Name.....
[Surname first; then given names]

College or School.....

Urbana-Champaign
Address.....

Course (or Major).....

Telephone.....

Class.....

Subject (i. e., Department)	Course No.	Sec.	Credit Hours	M	T	W	T	F	S	Memoranda

C
IZstI9
1963

UNIVERSITY OF ILLINOIS
APR - 8 1963
LIBRARY

JUNE 17 TO AUGUST 10

1963

SUMMER COURSES

BULLETIN · UNIVERSITY OF ILLINOIS · URBANA DEPARTMENTS

UNIVERSITY OF ILLINOIS BULLETIN

Volume 60, Number 54; January, 1963. Published nine times each month by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Office of Publication, 49 Administration Building (West), Urbana, Illinois.

CONTENTS

Calendar....4
General Information....5
Physical Examination....5
Admission and Readmission....6
Registration....7
Fees....9
Financial Aids....10
Final Examinations....10
Student Welfare....11
Room and Board....11
Illini Union....12
Listing of Courses....13
CIC Far Eastern Language Institute.14
Accountancy....15
Advertising....16
Aeronautical and Astronautical Engineering....17
Agricultural Economics....17
Agricultural Engineering....18
Agriculture....19
Agronomy....19
Animal Nutrition....21
Animal Science....20
Anthropology....21
Architecture....23
Art....24
Astronomy....28
Aviation....28
Bands....31
Biophysics....31
Botany....31
Business....33
Business Administration....33
Business Education....33
Business English....115
Business Law....34
Ceramic Engineering....35
Chemical Engineering....39
Chemistry....36
City Planning....40
Civil Engineering....40
Communications....42
Dairy Science....43
Dairy Technology....64
Division of General Studies....44
Economics....44
Education....46
Electrical Engineering....55
English....58
English for Foreign Students....114
Entomology....62
Finance....62
Food Technology....64
Forestry....64
French....65
General Engineering....67
Geography....68
Geology....69
German....70
Greek....72
Health Education....72
History....73
Home Economics....75
Horticulture....76
Hygiene....77
Industrial Education....77
Italian....77
Journalism....78
Labor and Industrial Relations....78
Landscape Architecture....79
Latin....79
Latin-American Studies Program....80
Law....81
Library Science....82
Linguistics....84
Management....85
Marketing....86
Mathematics....87
Mechanical Engineering....90
Metallurgical Engineering....91
Microbiology....91
Mining Engineering....92
Music....93
Nuclear Engineering....100
Philosophy....101
Physical Education....103
Physical Education for Men....102
Physical Education for Women....104
Physics....105
Physiology....106
Plant Pathology....107
Political Science....108
Portuguese....109
Psychology....109
Radio and Television....111
Recreation and Municipal Park Administration....112
Rhetoric and Composition....112
Rural Sociology....18
Russian....115
Russian Language and Area Studies.117
Safety Education....118
Sociology....119
Spanish....120
Speech and Theatre....122
Theoretical and Applied Mechanics....125
Veterinary Medical Science....126
Zoology....127

CALENDAR

May 22, Wed.-May 24, Fri.....Preregistration of student registration staff and graduate students registered in second semester, 1962-63.

May 27, Mon.-May 28, Tues.....Registration for 1963 Summer Session off-campus courses.

June 3, Mon., 4:40 p.m.....Meeting of Urbana-Champaign Senate.

June 4, Tues.-June 7, Fri.....Entrance examinations (to remove deficiencies in entrance requirements).

June 17, Mon.....Registration of graduate students not registered in second semester, and undergraduate students.

June 18, Tues.-June 19, Wed.....Late registration for graduate students not preregistered, and others.

June 18, Tues., 7:00 a.m.....Instruction begins.

June 18, Tues., 7:00-10:00 p.m.....Qualifying examination in English (for transfer students with eighty or more credit hours only).

June 19, Wed.....Earliest date for special examinations.

June 24, Mon., 5:00 p.m.....Latest date for full rebate of tuition and fees if withdrawing from the University or reducing program range.

July 4, Thurs.....Independence Day (holiday).

July 15, Mon.....Beginning of second four-week courses.

July 15, Mon., 5:00 p.m.....Latest date for rebate of one-half of tuition and fees if withdrawing from the University or reducing program range.

July 17, Wed.....Earliest date for one-half credit if withdrawing from the University for military service (four weeks completed).

July 18, Thurs., 7:00-10:00 p.m.....Qualifying examination in English.

July 24, Wed.....Latest date to withdraw from the University without petitioning for readmission.

July 29, Mon.....Latest date for special examinations.

July 29, Mon.....Latest date for foreign students to apply for admission in September, 1963.

July 31, Wed.....Earliest date for full credit if withdrawing from the University for military service (six weeks completed).

August 7, Wed.....Last day of instruction.

August 8, Thurs.....Study Day (classes dismissed).

August 9, Fri.-August 10, Sat.....Summer Session final examinations.

August 12, Mon.-September 7, Sat...Corps of Engineers post-Summer Session courses.

August 21, Wed.....Earliest date for special examinations.

August 26, Mon.....Latest date for domestic students to apply for admission or readmission and for foreign students to apply for readmission or, if they hold a degree from a U.S. college or university, to apply for admission in September, 1963.

GENERAL INFORMATION

To serve those who desire to pursue summer study, the University of Illinois at Urbana is offering a comprehensive schedule of courses of eight weeks duration, June 17 to August 10, 1963. A few departments are offering special intensive courses lasting only four to six weeks. All colleges on the Urbana campus are included in the summer program.

The University of Illinois Undergraduate Division at Chicago also is offering courses for eight weeks from June 21 to August 16, 1963.

Courses in the eight-week Summer Session are selected to meet the needs of school teachers and administrators, librarians, athletic coaches, and others whose employment prevents attendance during the regular school year, as well as graduate students pursuing work leading to advanced degrees, undergraduate students at the University of Illinois or elsewhere who wish to accelerate their programs of study, and other persons for whom summer study will contribute to vocational or personal goals. The needs of teachers are met not only in the courses and workshops in the College of Education, but also in a variety of courses elsewhere in the University.

Undergraduate and graduate students interested in taking independent study courses (reading and research) should confer with the head of the department concerned.

The resources of the University are open to students throughout the summer. They may take advantage of the extensive facilities of the University Library, the largest in any state university and third among all American universities, with more than four million books, films, pamphlets, music scores and parts, maps, manuscripts, and almost 19,000 periodicals and newspapers. They may profit from the museums, collections, shops, and laboratories. There are cultural and recreational opportunities — lectures, readings, concerts, theatre productions, dances, and social events.

General information concerning admission, registration procedures, fees, and board and room is given below. The courses offered in the eight-week Summer Session are listed alphabetically beginning on page 15.

PHYSICAL EXAMINATION

All new students proposing to enroll in the University of Illinois at Urbana-Champaign for a full semester are required, before completion of their first registration, to present adequate evidence of satisfactory physical and mental health as determined by the Director of Health Services.

The pre-entrance examination, except for foreign students, may be performed at the student's expense by a properly qualified doctor of medicine of his choice or by the Health Service free of charge until fifteen days prior to the registration date for the particular semester. It must be performed within the six-month period immediately preceding the registration date and is subject to final evaluation and approval by the Director of Health Services. Detailed explanatory material and medical forms for reporting the pre-entrance examination are forwarded to each student who receives a permit to enter in a fall or spring semester.

New students enrolling in the summer session are required to take the tuberculin test administered without charge by the Health Service as part of the registration procedure, but are not required to take the physical examination until such time as they enroll for a full semester. Anyone who has had a normal chest film within the past six months, and presents evidence thereof, is excused from the tuberculin test.

All high school and elementary school students coming to the campus for periods exceeding ten days are required to pass a physical examination, but are not required to take the tuberculin test.

In any particular situation where it is deemed advisable by the Health Service for public health reasons, the physical examination and tuberculin test may be required. All foreign students must pass a physical examination administered by the University Health Service before receiving a permit to register.

ADMISSION AND READMISSION

Admission as Candidates for Degrees

All students, *graduate and undergraduate,* not previously enrolled at the University of Illinois who are planning to register for the first time this summer should submit applications for admission to the Dean of Admissions and Records well in advance of June 17, 1963. Application blanks may be obtained by writing to the Office of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois. Undergraduate application blanks are available also in the offices of high school principals and counselors.

Undergraduate students who wish to transfer to the University from another college or university should submit as early as possible the completed application for admission. In addition, if the applicant is to be a candidate for a degree, official high school and college transcripts of record must be sent directly from each institution previously attended.

Candidates for advanced degrees who were registered in the Graduate College for resident study, or in extramural courses as degree candidates, in the 1962 Summer Session or in the first or second semester of 1962-63, *need not apply for readmission to the Summer Session.*

Other former graduate students, and undergraduate students not in attendance the second semester of 1962-63, who expect to return this summer, should file applications for readmission well in advance of registration in order to allow ample time for preparation of registration materials. This will facilitate the entire procedure for each student concerned and avoid unnecessary delay in completing his registration. Those who have not notified the Dean of Admissions and Records in advance of registration day of their intentions to re-enter, and new students who have not received a permit to enter, should go first to the Office of Admissions and Records. Undergraduate students report to 100a Administration Building; graduate students report to 157 Administration Building (West). *They may go there at any time without respect to the alphabetical order of registration on pages 7 and 8.*

For additional information on any matter concerning admission, write to the Dean of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois.

Admission of New Undergraduate Students as Candidates for Degrees

Application for admission to the 1963 Summer Session from new undergraduates, as candidates for degrees, whose credentials show that they have met the requirements of the requested curriculum as published in the University Undergraduate Study catalog, are considered as indicated below.

RESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper three-fourths of their high school graduating classes.
2. *Freshmen* who rank in the lowest quarter of their high school graduating classes who present one of the following evidences of ability to do satisfactory work at the University:
   a. A passing score on a test, or tests, as prescribed by the All-University Committee on Admissions. (Either the ACT or the SAT of the CEEB have been approved for this purpose, but those presenting SAT scores still must submit ACT scores no later than fifteen days following registration.)
   b. Evidence of having attempted twelve or more semester hours of work at another college or university of recognized standing, and meeting the regular University requirements for admission as a transfer student.
   c. Applying for admission to a session which begins at least twelve months after graduation from high school, provided that (1) in this twelve-month period the applicant has not attempted as much as twelve semester hours of work at another college or university of recognized standing, and (2) he meets all other University requirements for admission that are applicable to him. In such cases, he is not required to take the test, or tests, prescribed

in (a) above *prior to issuance of a permit to enter,* but he, too, must submit ACT scores no later than fifteen days following registration.

3. *Transfers* who satisfy the scholastic and other requirements specified in the Undergraduate Study catalog.

NONRESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper 50 per cent of their high school graduating classes.
2. *Transfers* whose scholastic averages are at least 3.0 (C).

Admission and Readmission as Non-Degree Candidates

Applications of undergraduate students for admission or readmission to the Summer Session, not as candidates for degrees, should be submitted to the Office of Admissions and Records well in advance of registration day. They may be approved under one of the following conditions:

1. Former students who were eligible for readmission when they left the University may register in the summer upon approval of the Dean of Admissions and Records.
2. Transfer students who present a statement of eligibility to return to the collegiate institution last attended.
3. Persons employed as teachers who submit statements from the school authorities attesting to their employment.
4. Others, twenty-one or more years of age, who give evidence that they possess the requisite background and ability to pursue profitably summer courses for which they are qualified. They must receive the approval of the Dean of Admissions and Records.

Students admitted to the Summer Session as non-degree candidates who later wish to enter one of the colleges of the University as degree candidates must seek admission at that time in the usual manner from the Office of Admissions and Records.

REGISTRATION

Eight-Week Courses

Monday, June 17, through Saturday, August 10, 1963

No course may be taken for graduate credit unless it is so designated in this Time Table of courses offered. The normal credit which a graduate student can earn in eight weeks is two units. In exceptional cases two and one-half units may be carried with the approval of the adviser. Under no circumstances is a student permitted to carry more than two and one-half units.

Further information concerning the regulations for advanced degrees is contained in the catalog of the Graduate College, copies of which may be obtained by writing to the Dean of Admissions and Records, 100a Administration Building, or the Dean of the Graduate College, 304 Administration Building (East).

PREREGISTRATION

Wednesday, May 22, through Friday, May 24, 1963

Graduate Students

(Registered on the Urbana campus for the second semester of 1962-63)

Such students should register according to the schedule below. Those not completing their registration during this period *may not register until the time designated in the late registration schedule below.* Program cards and other preliminary registration materials may be obtained from the department offices on or after Wednesday, May 15. Authorization cards to complete registration will be available at the Graduate College office May 22 through May 24, according to the following schedule:

A through C.....Thursday afternoon, May 23
D through G.....Friday morning, May 24
H through K.....Thursday morning, May 23

L through O.....Wednesday morning, May 22
P through Sj.....Wednesday afternoon, May 22
Sk through Z.....Friday afternoon, May 24

Teachers commuting to the campus during the second semester of 1962-63 who are unable to be here during the period designated above are permitted to register on Monday, June 17, 1963.

Undergraduate Students

Wednesday, May 22, through Friday, May 24, 1963

Undergraduate students employed in registration duties (*special permit required*).

REGULAR REGISTRATION

Monday, June 17, 1963

Graduate Students

(*Not* registered on the Urbana campus for the second semester of 1962-63)

The program card and other preliminary registration materials may be obtained in advance of registration day at the department offices on or after Tuesday, June 11. After the preliminary materials have been completed in consultation with the adviser, authorization cards for registration will be distributed in 259 English Building, in accordance with the schedule listed below, *but not before.*

Undergraduate Students

Both new and former Summer Session students not assigned to a college will receive registration forms at the Information Table located inside the northeast entrance of the Armory; other undergraduate students receive registration materials at the offices of the deans of their colleges. Authorization cards to complete registration are released in accordance with the schedule listed below.

Graduate and Undergraduate Students

Nonacademic employees (special permit required)..... 8:00 a.m.
A through B..... 1:30 p.m.
C through E..... 2:00 p.m.
F through G..... 2:30 p.m.
H through J..... 8:00 a.m.
K through L..... 8:30 a.m.
M through O..... 9:00 a.m.
P through R..... 9:30 a.m.
S.....10:00 a.m.
T through Z.....10:30 a.m.

Regular registration is completed in the Armory. Any registration completed after 5:00 p.m. on Monday, June 17, 1963, is considered a late registration and the student is subject to a late registration fine of $15.00.

LATE REGISTRATION

Tuesday, June 18, and Wednesday, June 19, 1963

Graduate Students

(Graduate students registered on the Urbana campus for the second semester of 1962-63 *who did not complete registration during the period provided, May 22 through May 24*)

Program cards and other preliminary materials should be obtained from the department offices. Authorization cards will be distributed from the Graduate College office during regular office hours according to the following schedule:

A through E.....Tuesday afternoon, June 18
F through K.....Wednesday morning, June 19
L through R.....Wednesday afternoon, June 19
S through Z.....Tuesday morning, June 18

Second Four-Week Courses

Monday, July 15, through Saturday, August 10, 1963

Students wishing to register only in courses offered in the second four weeks of the eight-week Summer Session should complete their registration on or before Monday, July 15, 1963.

Directory of Registration Offices

Admissions and Records:
- Graduates.....157 Administration Building (West)
- Undergraduates.....100a Administration Building

Agriculture, College of.....104 Mumford Hall
Aviation, Institute of.....318 Civil Engineering Hall
Commerce and Business Administration, College of.....214 David Kinley Hall
Education, College of.....105 Gregory Hall
Engineering, College of.....119 Civil Engineering Hall
Fine and Applied Arts, College of.....110 Architecture Building
Graduate College.....304 Administration Building (East)
Journalism and Communications, College of.....119 Gregory Hall
Law, College of.....209 Law Building
Liberal Arts and Sciences, College of.....203 Lincoln Hall
Physical Education, College of:
- Men.....107 Huff Gymnasium
- Women.....117 Women's Gymnasium

Summer Session.....358 Administration Building (West)
Veterinary Medicine, College of.....135 Veterinary Medicine Building

FEES

All fees are due and payable in full at the time of registration unless the Installment Plan is elected. An additional charge of $2.00 is made for this service. The fees are as follows:

	Full Program		Partial Programs			
	Range I		Range II		Range III	
	Above 5 hours		Above 2½ to 5 hours		Above 0 to 2½ hours	
	Above 1¼ units		Above ¾ to 1¼ units		Above 0 to ¾ unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
Tuition (except those holding exemptions)	$45.00	$130.00	$30.00	$90.00	$20.00	$55.00
Service Fee[1]	20.00	20.00	15.00	15.00	10.00	10.00
Hospital-Medical-Surgical Insurance Fee[2]	5.00	5.00	5.00	5.00	5.00	5.00
Total	$70.00	$155.00	$50.00	$110.00	$35.00	$70.00

Registration in Noncredit Courses (All Campuses)

Students who register in noncredit courses pay tuition fees as follows:

1. Persons registered *on campus* for thesis research only without credit are charged a tuition fee of $10.00 plus a Service Fee of $15.00 and the Hospital-Medical-Surgical Insurance Fee.
2. Persons registered for thesis research *in absentia* without credit are charged only a tuition fee of $10.00.
3. No charge is made for noncredit registrations in seminars, either alone or in addition to other courses.
4. Persons not holding tuition waivers who are registered for less than a full program of credit courses (as defined in the fee schedule) pay $15.00 for each noncredit course in addition to the required tuition and fees for the credit courses. If taken alone, noncredit courses other than thesis research and seminars are assigned to Range III.

---

[1] Persons on the academic, administrative, or permanent nonacademic staff of the University, or on the staffs of allied agencies, and persons registered *in absentia* or off-campus are exempt from the Service Fee.

[2] Students presenting evidence of equivalent coverage may receive a waiver of this fee upon approval of a petition submitted to the University Insurance Office not later than the final day established for full refund of fees. Persons registered for thesis research *in absentia* are not assesed this fee.

5. University employees who register at the request of their department in non-credit courses especially established to improve the work of the employee are not charged for such courses.

The above list of fees includes only those that are generally applicable to all students at Urbana. Complete information concerning fees applicable only in special cases (as change of program after registration, flight instruction fee, visitor's fee, etc.) and fee exemption regulations are contained in the University's Undergraduate Study and the Graduate College catalogs, or may be obtained in Room 105 Administration Building (East) of the Office of Admissions and Records.

FINANCIAL AIDS

Scholarships and loan funds are available for students attending the University in the summer. For detailed information about scholarships, write to the Director of the Undergraduate Scholarship Program, 907 South Sixth Street, Champaign, Illinois. Application blanks and information about loan funds at the University of Illinois in Urbana may be obtained from the office of the Bursar, 100b Administration Building, Urbana, or the offices of the Dean of Men, 110 Student Services Building, or the Dean of Women, 130 Student Services Building, Champaign. Information concerning National Defense Education Act loan funds may be obtained from the office of the Dean of Students, 310 Student Services Building, Champaign, Illinois.

FINAL EXAMINATIONS

Eight-Week Courses

Friday, August 9, and Saturday, August 10, 1963

The examinations for classes meeting four, five, or six times a week are *two hours* in length; those for classes meeting one, two, or three times a week are *one hour* in length. Where it is desired to give a two-hour examination in a course regularly scheduled for a one-hour examination, the time for the examination should be arranged by the instructor at any hour on either of the examination days that will avoid conflicts.

Examinations for courses meeting only once a week, courses meeting at 12:00 noon or after 4:00 p.m., and laboratory or graduate courses also should be arranged by the instructor at any hour within the examination period that will avoid conflicts.

For courses meeting two to six times a week, the schedule of examinations is as follows:

Seven o'clock classes

Meeting four, five, or six times a week.....Friday, 7:00- 9:00 p.m.
Meeting MWF, or any two of those days.....Friday, 7:00- 8:00 p.m.
Meeting TTS, or any two of those days.....Friday, 8:00- 9:00 p.m.

Eight o'clock classes

Meeting four, five, or six times a week.....Saturday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 2:00- 3:00 p.m.

Nine o'clock classes

Meeting four, five, or six times a week.....Saturday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Saturday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 11:00-12:00 noon

Ten o'clock classes

Meeting four, five, or six times a week.....Saturday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Saturday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 9:00-10:00 a.m.

Eleven o'clock classes

Meeting four, five, or six times a week.....Friday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Friday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Friday, 9:00-10:00 a.m.

One o'clock classes

Meeting four, five, or six times a week.....Friday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Friday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Friday, 2:00- 3:00 p.m.

Two o'clock classes

Meeting four, five, or six times a week.....Friday, 3:00 5:00 p.m.
Meeting MWF, or any two of those days.....Friday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Friday, 4:00- 5:00 p.m.

Three o'clock classes

Meeting four, five, or six times a week.....Saturday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 4:00- 5:00 p.m.

Four o'clock classes

Meeting four, five, or six times a week.....Friday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Friday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Friday, 11:00-12:00 noon

Note: For a course so scheduled that the final examination may be given in more than one period, the earliest time in the examination schedule should be chosen. For example, a course regularly meeting on Monday, Wednesday, and Friday, or any two of these days, 1:00 to 3:00 p.m., should schedule the examination for Friday, 1:00 to 2:00 p.m., not Friday, 3:00 to 4:00 p.m.

STUDENT WELFARE

The University makes every effort to provide the most favorable conditions for the life of the student while he is living in the community. The Dean of Students coordinates and unifies the work of the agencies interested in the student's well-being and gives advice and guidance on problems outside the classroom. Advisers and members of the faculty assist students in arranging programs of study and advise them relative to their classroom work. Aptitude testing and counseling services are provided by the Student Counseling Service.

The University Health Service for students, located in McKinley Hospital, 1109 S. Lincoln Avenue, Urbana, Illinois, is maintained to promote physical and mental health, to control communicable diseases, and to teach the essentials of healthful living. McKinley Hospital serves both students and faculty.

The office of the Dean of Students maintains an employment service for students who desire part-time employment while attending the University. No charge is made for this service.

The offices of the Dean of Students, Student Employment, and the Student Counseling Service are located in the Student Services Building, 610 E. John Street, Champaign, Illinois.

ROOM AND BOARD

During the eight-week Summer Session, housing accommodations in University residence halls will be available in the Pennsylvania Avenue Residence Halls, the newest of the University residence halls. All facilities other than the living units are operated on a coeducational basis with dining, lounge, recreation, library, and office facilities being shared by the men and women residents. All of the shared facilities are air conditioned. Room and board rates for the entire eight-week session are as follows:

	20 Meals per Week	*15 Meals per Week*
Single Room	$220.00	$195.00
Double Room	200.00	175.00

Some residence hall space is available for the use of persons attending University-sponsored short courses or conferences during the summer period. The charge for housing accommodations is $3.00 to $4.25 a person per night and the daily charge for meals is $3.75.

Applications for residence may be obtained from the Housing Division, 420 Student Services Building, Champaign, Illinois.

Rooms, and in some cases, room and board, are also available at privately-operated housing units near the campus. Facilities in housing of this type are listed in the Housing Division Office. Room lists and additional information may be obtained by writing the Housing Division.

ILLINI UNION

The Illini Union is the community center for the students, faculty, staff, and alumni on the Urbana campus of the University of Illinois. In conjunction with other student organizations, the Illini Union sponsors a broad program of social, cultural, and recreational activities for the students. Among its many facilities are various food service units consisting of a cafeteria, soda fountain, dining room, and several banquet rooms. The various lounges are meeting places for students and faculty between classes and at other free times. The Browsing Room contains the latest fiction, biography, and other books for general reading as well as a record-lending library. Programs of recorded classical music are held under the direction of a student committee. Recreational facilities include bowling, billiard tables, television, and rooms for games. Dances are scheduled during the week. All students are entitled to the full use of the facilities of the Illini Union.

ADDITIONAL INFORMATION

For additional information concerning attendance in the Summer Session at the University of Illinois, write to:

Dean of Admissions and Records
University of Illinois
100a Administration Building
Urbana, Illinois

LISTING OF COURSES

The following time table of summer courses offered by the University is subject to whatever changes may prove necessary at registration time. Notices of all changes in time or place of meeting of classes will be supplied to advisers for checking program cards during registration. Names of instructors are listed subject to their acceptance of appointment for summer service.

Arrangement

The arrangement of subjects in this time table is alphabetical beginning on page 15. The courses offered in each subject are listed numerically with headings to indicate the students for whom they are designed. Courses for undergraduates (designed for freshmen and sophomores) are numbered 100 to 199; for advanced undergraduates (designed for juniors and seniors), 200 to 299; for advanced undergraduates and graduates (junior, senior, or graduate standing required), 300 to 399; for graduates, 400 to 499. Following the title of each course is a statement of the requirements, if any, for admission to the course.

Class periods for each course are indicated by numerals for the hours of the day and by letters for the days of the week. For example, "8-10 MWF" indicates that the class period begins at 8:00 a.m. and continues for two hours on Monday, Wednesday, and Friday; while "11 TTS" means that the class period begins at 11:00 a.m. and continues for fifty minutes on Tuesday, Thursday, and Saturday. The place of meeting of each class is shown by the number of the room and the name of the building.

Credit

Credit is counted in semester hours for undergraduates and in units for graduates, as shown in the description of each course.

Students having ninety or more hours of credit, without regard to the division in which they may be enrolled, are classified as seniors for the purpose of designating those freshman courses which, when taken by seniors, carry reduced credit.

Some courses have variable credit, as 3 to 5 hours or ½ to 2 units, and in registering for a course with variable credit each student puts on his program card the number of hours or units for which he intends to take the course.

Buildings

University buildings are designated by the following abbreviations:

Aeronautical Engineering Laboratory	Aero Lab
Agricultural Engineering Building	Agr Eng
Altgeld Hall	AH
Animal Genetics Building	An Gen
Animal Sciences Laboratory	ASL
Architecture Building	Arch
Bevier Hall	Bev Hall
Burnsides Research Laboratory	BRL
Burrill Hall	Bur Hall
Ceramics Building	Cer
Chemistry Annex	CA
Child Development	CD
Civil Engineering Hall	CEH
Commerce Annex	Com Annex
Dairy Manufactures Building	DMB
Davenport Hall	DH
David Kinley Hall	DKH
East Chemistry Building	EC
Education Project and Guidance Building	EPGB
Electrical Engineering Annex	EE Annex
Electrical Engineering Building	EEB
Elementary Education Center	EEC
English Building	EB
Fine Arts Building	FAB
Floriculture Building	Flor
Foundry and Pattern Laboratory	Fdy & Pat Lab
Gregory Hall	GH
Harker Hall	HH
Hill Annex	HA
Horticulture Field Laboratory	HFL
Huff Gymnasium	HG
Hydraulic Engineering Laboratory	Hyd Eng Lab
Illini Hall	IH
Krannert Art Museum	KM
Law Building	Law
Library	Lib
Lincoln Hall	LH
Mechanical Engineering Building	MEB
Mechanical Engineering Laboratory	MEL
Men's Old Gymnasium	MOG
Mining and Metallurgy Laboratory	Met Lab
Mumford Hall	MH
Natural History Building	NHB
Noyes Laboratory of Chemistry	NL
Observatory	Observ
Physics Building	PB
Physics Laboratory	PL
Practice Annex	PA
Quonset	Q
Rural Electric Laboratory	RE Lab
Smith Music Hall	SMH
Speech Clinic	Sp Clinic
Stiven House	SH
Stock Judging Pavilion	SP
String Annex	SA
Student Rehabilitation Center	Rehab Center
Surveying Building	Surv Bldg
Talbot Laboratory	TL
Theory Annex	TA
Transportation Building	TB
University High School	UHS
Vegetable Crops Building	Veg Crops
Veterinary Clinic, Large Animal	VCLA
Veterinary Clinic, Small Animal	VCSA
Veterinary Medicine Building	VM
Women's Gymnasium	W Gym

THE CIC FAR EASTERN LANGUAGE INSTITUTE AT THE UNIVERSITY OF MICHIGAN

June 24 through August 17, 1963

The Committee on Institutional Cooperation (CIC), consisting of the Universities of "The Big Ten," plus the University of Chicago, offers the first of five rotating Far Eastern Language Institutes at the University of Michigan.

For qualified University of Illinois undergraduate students who participate in this program the courses will be exactly as though taken at this University. That is, they will count toward the degree and they will count as residence credit.

The faculty will be drawn from the Chinese and Japanese teaching staffs of the CIC institutions, to whom specialists from universities outside the Big Eleven will be added.

A limited number of grants for scholarships and fellowships will be available for students who show high competence.

During the summer of 1963 intensive courses will be offered in elementary and advanced Chinese and Japanese at the undergraduate and graduate level. University of Illinois graduate students who participate in the program may petition for credit in the usual way if the work taken is at the graduate level.

Students desiring further information concerning these courses or forms of financial aid connected with the program should see Dean C. P. Viens, 203 Lincoln Hall.

ACCOUNTANCY

DEPARTMENT OFFICE 321 D K H

COURSES FOR UNDERGRADUATES

ACCY 101 PRINCIPLES OF ACCOUNTING I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
LECT-DISC C 10 MTUWTHFS 108 D K H

ACCY 105 PRINCIPLES OF ACCOUNTING II.
PREREQUISITE--ACCY. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
LECT-DISC B 9 MTUWTHFS 113 D K H WAKEFIELD

ACCY 106 ELEMENTARY COST ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
LECT-DISC D 11 MTUWTHFS 113 D K H

ACCY 108 INTERMEDIATE ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
LECT-DISC C 10 MTUWTHFS 113 D K H CASLER

COURSES FOR ADVANCED UNDERGRADUATES

ACCY 201 FUNDAMENTALS OF ACCOUNTING.
A SURVEY COURSE FOR NON-COMMERCE STUDENTS ONLY.
3 HOURS
LECT-DISC A 8 MTUWTHFS 113 D K H LUKAS

ACCY 274 BASIC FEDERAL INCOME TAX ACCOUNTING.
PREREQUISITE--ACCY. 108.
3 HOURS
LECT-DISC A 8 MTUWTHFS 122 D K H WHEELER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ACCY 308 ADVANCED ACCOUNTING.
PREREQUISITE--ACCY. 106 AND 108, AN AVERAGE OF C OR BETTER IN
PRECEDING COURSES IN ACCOUNTANCY.
3 HOURS, OR 3/4 UNIT
LECT-DISC B 9 MTUWTHFS 215 D K H LUKAS

ACCY 366 ADVANCED COST ACCOUNTING.
PREREQUISITE--MINIMUM OF NINE HOURS OF ACCOUNTANCY, INCLUDING
ACCY. 106.
2 HOURS, OR 1/2 UNIT
LECT-DISC X 12 MTUWTH 113 D K H THOMAS

ACCY 371 AUDITING.
PREREQUISITE--ACCY. 308.
3 HOURS, OR 3/4 UNIT
LECT-DISC C 10 MTUWTHFS 317 D K H WAKEFIELD

ACCY 377 ADVANCED PROBLEMS.
PREREQUISITE--SENIOR STANDING, CREDIT OR REGISTRATION IN ACCY. 371.
3 HOURS, OR 1 UNIT
LECT-DISC D 11 MTUWTHFS 317 D K H CASLER

COURSES FOR GRADUATES

ACCY 461 ADMINISTRATIVE ACCOUNTING.
1 UNIT
LECT-DISC 8-10 M TH 317A D K H THOMAS

ACCY 472 AUDITING STANDARDS AND TECHNIQUES.
1 UNIT
LECT-DISC 8-10 TU F 317A D K H WYATT

ACCY 481 CONCEPTS AND PRINCIPLES.
1 UNIT
LECT-DISC 2-4 TU F 317A D K H WYATT

ACCY 483 INCOME DETERMINATION.
1 UNIT
LECT-DISC 8-10 W S 317A D K H FESS

ACCY 493 SPECIAL RESEARCH PROBLEMS.
1/4 TO 2 UNITS
CONF ARR MAUTZ

ACCY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
M. S. CANDIDATES SHOULD REGISTER IN SECTION S1, AND PH. D.
CANDIDATES IN SECTION S2.
DISC S1 ARR MAUTZ
DISC S2 ARR MAUTZ

ADVERTISING

DEPARTMENT OFFICE 120A G H

COURSES FOR ADVANCED UNDERGRADUATES

ADV 281 INTRODUCTION TO ADVERTISING.
SAME AS MKTG. 281.
PREREQUISITE--JUNIOR STANDING.
3 HOURS
LECT-DISC 9 MTUWTHFS 113 G H MOYER

ADV 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS
CONF ARR MOYER

COURSES FOR GRADUATES

ADV 481 ADVANCED ADVERTISING PRINCIPLES.
SAME AS MKTG. AND COMM. 481.
#GRADUATE STUDENTS MAY NOT RECEIVE CREDIT FOR BOTH ADV. 388 AND 481.
#1 UNIT
LECT-DISC 10-12 M W 123 G H MOYER

ADV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN ADVERTISING.
1 OR 2 UNITS
CONF ARR MOYER

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

DEPARTMENT OFFICE 101 T B

COURSES FOR GRADUATES

A A E 493 SPECIAL PROBLEMS.
1 OR 2 UNITS
CONF A ARR STAFF

A A E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF A ARR STAFF

AGRICULTURAL ECONOMICS
INCLUDING RURAL SOCIOLOGY

AGRICULTURAL ECONOMICS

DEPARTMENT OFFICE 305 M H

COURSES FOR ADVANCED UNDERGRADUATES

AG EC 200 PROBLEMS IN AGRICULTURAL ECONOMICS.
PREREQUISITE--MINIMUM GRADE-POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION. CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE IN ADVANCE OF REGISTRATION.
3 TO 5 HOURS
A--AGRICULTURAL MARKETING
BARTLETT, BRINEGAR, BROADBENT, HIERONYMUS
JUDGE, KELLY, MUTTI, ROUSH, SCHMIDT,STOREY
B--AGRICULTURAL PRICES AND STATISTICAL ANALYSIS
JUDGE, WEST
C--FARM MANAGEMENT AND LAND ECONOMICS
BAKER, DOVRING, HEADLEY, HERBST,
HOLCOMB, REISS, SWANSON,
THOMPSON, WILLS
D--RURAL ORGANIZATION FOLSE, LINDSTROM
E--AGRICULTURAL LAW KRAUSZ
F--AGRICULTURAL POLICY HALCROW, SCHMIDT, SPITZE, THOMPSON
G--AGRICULTURAL FINANCE BAKER, SPITZE
CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG EC 305 AGRICULTURAL POLICIES AND PROGRAMS.
PREREQUISITE--ECON. 108.
FIELD TRIP. ESTIMATED EXPENSE. $5.
3 HOURS. OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 13

LECT-DISC	A	8-10	M W F	128	M H	SPITZE
	A	7-10	TU TH	128	M H	

AG EC 325 ADVANCED FARM MANAGEMENT.
PREREQUISITE--AG. EC. 220.
FIELD TRIPS. ESTIMATED EXPENSE. $10.
3 HOURS. OR 1/2 UNIT

LECT-DISC	C	11	MTUWTHF	127	M H	HEADLEY
	C	12	W	127	M H	

COURSES FOR GRADUATES

AG EC 491 SEMINAR AND SPECIAL TOPICS.
EACH GRADUATE STUDENT WHOSE MAJOR IS AGRICULTURAL ECONOMICS MUST REGISTER IN THIS COURSE.
*ONLY STUDENTS WHO REGISTER FOR CREDIT AND COMPLETE SPECIAL STUDIES UNDER DIRECTION OF ONE OR MORE STAFF MEMBERS WILL RECEIVE CREDIT.
*0 TO 2 UNITS

LECT-DISC	3	W	405	M H	STAFF

AG EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

RURAL SOCIOLOGY
DEPARTMENT OF AGRICULTURAL ECONOMICS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R SOC 370 POPULATION AND SOCIAL ECOLOGY.
SAME AS SOC. 370.
PREREQUISITE--SOC. 185 OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	1-230	MTUWTH	326 L H	LAZERWITZ

COURSES FOR GRADUATES

R SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY.
CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

CONF	ARR	STAFF

AGRICULTURAL ENGINEERING

DEPARTMENT OFFICE 206A AGR ENG

NOTE COURSES IN AGRICULTURAL ENGINEERING FOR NON-ENGINEERING STUDENTS ARE 300, 331. COURSE FOR ENGINEERING STUDENTS IS 396.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 300 SPECIAL PROBLEMS.
PREREQUISITE--NONENGINEERING STUDENT, MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND SPECIAL PROBLEMS COURSE.
3 HOURS, OR 1/2 UNIT

CONF	ARR	STAFF

AG E 331 FUNCTION, APPLICATION, ADJUSTMENT, AND MANAGEMENT OF FARM MACHINERY.
PREREQUISITE--AG. E. 112 OR 221 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 13

LECT-DISC	3-545	MTUWTHF	132 AGR ENG	YOERGER
LAB	3-545	MTUWTHF	TRACTOR LAB	

AG E 396 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING.
3 HOURS. OR 1/2 UNIT
CONF ARR STAFF

COURSES FOR GRADUATES

AG E 496 PROBLEMS IN AGRICULTURAL ENGINEERING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1 UNIT
CONF ARR STAFF

AG E 499 THESIS RESEARCH.
1 TO 2 UNITS
CONF ARR STAFF

AGRICULTURE

COURSES FOR ADVANCED UNDERGRADUATES

AGR 208 COOPERATIVE EXTENSION WORK--SUMMER TRAINING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS
CONF ARR ANDERSON

AGRONOMY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AGRON 300 ADVANCED SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION. SENIOR STANDING. CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
*CREDIT IS NOT GIVEN TO GRADUATE STUDENTS MAJORING IN AGRONOMY.
*3 TO 5 HOURS. OR 1/2 TO 2 UNITS
LAB-DISC ARR STAFF

AGRON 306 FERTILIZERS AND THEIR SOIL REACTIONS.
PREREQUISITE--AGRON. 101.
3 HOURS. OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 13.
LECT-DISC 1-3 MTUWTHF 180 D H MELSTED
7-9PM TH 180 D H

COURSES FOR GRADUATES

AGRON 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
WORK TO BE TAKEN IN THE FOLLOWING SUBJECTS--
A--SOILS ALDRICH, BEAVERS, BRAY, FEHRENBACHER, GIESEKING, KLUTE, KURTZ, LANG, MELSTED, ODELL, PETERS, RUSSELL, SABEY, STEVENSON, AND TYNER
B--CROPS ALEXANDER, BROWN, BURGER, EARLEY, GERDEMANN, HADLEY, HAGEMAN, HANSON, HITTLE, HOOKER, HOWELL, JACKOBS, JACOB, LAUGHNAN LENG, PATTERSON, PENDLETON, SEIF, SLIFE, WEIBEL, WILSON, AND WOOLLEY.
CONF ARR

ANIMAL SCIENCE
INCLUDING ANIMAL NUTRITION

DEPARTMENT OFFICE 328 M H

COURSES FOR ADVANCED UNDERGRADUATES

AN S 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5. NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING. CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
LAB ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AN S 301 BEEF PRODUCTION.
PREREQUISITE--AN.S. 102 OR 220.
3 HOURS. OR 3/4 UNIT
FIRST FOUR WEEKS--JUNE 18 - JULY 13.
LECT 7-9PM TU 128 M H NEUMANN
10-12 MTUWTHF 128 M H

COURSES FOR GRADUATES

AN S 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ZOOL. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*COMBINED CREDIT IN AN. S. 407 AND 408 MAY NOT EXCEED TWO UNITS.
*1/2 TO 1 UNIT
LAB ARR DZIUK

AN S 410 RESEARCH METHODS IN ANIMAL SCIENCE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/4 TO 1 UNIT
CONF ARR BECKER, BREIDENSTEIN, GARRIGUS, NEUMANN, SCOTT

AN S 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR GRADUATE STAFF

ANIMAL NUTRITION
DIVISION OF DEPARTMENT OF ANIMAL SCIENCE

DIVISION OFFICE 120 A S L

COURSES FOR GRADUATES

AN NU 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
DISC ARR GRADUATE STAFF

ANTHROPOLOGY

DEPARTMENT OFFICE 137 D H

MAJOR--TWENTY HOURS FROM ANY COURSE IN ANTHROPOLOGY. INCLUDING ANTHROP. 102 AND 103. A DOUBLE MAJOR IN ANTHROPOLOGY AND SOCIOLOGY IS NOT PERMITTED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS. WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ECONOMICS. GEOGRAPHY. HISTORY. LINGUISTICS. PHILOSOPHY. POLITICAL SCIENCE. PSYCHOLOGY. SOCIOLOGY. AND ZOOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES OR IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A SOLE MINOR.
NOTE--INDIVIDUAL INSTRUCTION WILL BE AVAILABLE FOR EDMUND J JAMES SCHOLARS.

COURSES FOR UNDERGRADUATES

ANTH 103 INTRODUCTION TO CULTURAL ANTHROPOLOGY.
*CREDIT IS NOT GIVEN FOR BOTH ANTH. 103 AND SOC. 104.
*4 HOURS
*HONORS SECTION OPEN TO JAMES SCHOLARS AND OTHER HONORS STUDENTS.

LECT		10-12	MTUW	311N D H	LEHMAN
QUIZ	A	10-12	TH	311N D H	
QUIZ	B	10-12	F	311N D H	

COURSES FOR ADVANCED UNDERGRADUATES

ANTH 290 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS
CONF A ARR LEHMAN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ANTH 354 FIELD TECHNIQUES IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103. OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS.
*3 HOURS. OR 1 UNIT

CONF	A	ARR	BLUHM
CONF	B	ARR	BAREIS

ANTH 355 LABORATORY TECHNIQUES AND PROBLEMS IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS.
*3 HOURS, OR 1 UNIT

LAB-DISC	A	ARR		BLUHM
LAB-DISC	B	ARR		BAREIS

ANTH 364 FIELD WORK IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED. CONCURRENT REGISTRATION IN ANTH. 365, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 2 UNITS.
*3 HOURS, OR 1 UNIT

CONF	A	ARR		CASAGRANDE

ANTH 365 ANALYSIS OF FIELD DATA IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 2 UNITS.
*3 HOURS, OR 1 UNIT

CONF	A	ARR		CASAGRANDE

ANTH 368 PEOPLES AND CULTURES OF INDIA.
PREREQUISITE--ANTH. 102 AND 103 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	A	2-4	MTUW	137 D H	LEHMAN

ANTH 369 INTRODUCTION TO HUMAN ECOLOGY.
SAME AS GEOG., PHYSL., ZOOL., AND SOC. 369.
PREREQUISITE--ONE YEAR OF BIOLOGY AND ONE YEAR OF ANTHROPOLOGY, GEOGRAPHY, GEOLOGY, OR SOCIOLOGY.
*A TERM PAPER IS REQUIRED FOR CREDIT, DEPENDING UPON THE NATURE AND MAGNITUDE OF THIS PAPER THE CREDIT MAY BE 3 OR 5 HOURS.
*3 OR 5 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	A	10-12	MTUW	137 D H

COURSES FOR GRADUATES

ANTH 489 READINGS IN ANTHROPOLOGY.
PREREQUISITE--ONE SEMESTER OF GRADUATE WORK IN ANTHROPOLOGY--CONSENT OF ADVISER.
1/2 OR 1 UNIT

CONF	A	ARR		SHIMKIN

ANTH 490 INDIVIDUAL TOPICS IN ANTHROPOLOGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

CONF	A	ARR		STAFF

ANTH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS

CONF	*A	ARR		STAFF
CONF	*B	ARR		STAFF

DEPARTMENT OFFICE 106 ARCH

IN THE CURRICULUM IN ARCHITECTURE, NORMAL COURSE PROGRESS IN SEQUENCE IS IMPERATIVE. STUDENTS FAILING TO COMPLETE ANY REQUIRED COURSE MORE THAN ONE SEMESTER LATER THAN THE TIME DESIGNATED IN THE CURRICULUM, ARE PROHIBITED FROM PROGRESSIVE REGISTRATION IN ARCHITECTURAL COURSES UNTIL THE DEFICIENCY IS CORRECTED. APPLICABLE TO STUDENTS ENTERING IN SEPTEMBER, 1958.

COURSES FOR UNDERGRADUATES.

ARCH 171 DRAWING THEORY.
NOT OPEN TO STUDENTS EXPECTING A DEGREE IN ARCHITECTURE.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

LAB	2-5	MTUWTH	235 F A B	WALLACE

ARCH 172 DRAWING THEORY.
NOT OPEN TO STUDENTS EXPECTING A DEGREE IN ARCHITECTURE.
PREREQUISITE--ARCH. 171.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

LAB	2-5	MTUWTH	237 F A B	WALLACE

COURSES FOR ADVANCED UNDERGRADUATES

ARCH 233 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 132, CREDIT OR REGISTRATION IN T A M 150 OR 171, REGISTRATION IN ARCH 241.
3 HOURS

LAB	8-12	MTUWTH	206 F A B	REPLINGER
	1	TU TH	206 F A B	

ARCH 234 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 233.
3 HOURS

LAB	8-12	MTUWTH	216 F A B	REPLINGER
	1	TU TH	216 F A B	

ARCH 235 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 234. REGISTRATION IN ARCH. 265.
5 HOURS

LAB	8-12	M W F	224 F A B	SWING
	1-5	M W F	224 F A B	
	1-4	TU TH	224 F A B	

ARCH 236 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 235 AND 265.
5 HOURS

LAB	8-12	M W F	232 F A B	SWING
	1-5	M W F	232 F A B	
	1-4	TU TH	232 F A B	

ARCH 241 MATERIALS AND METHODS OF CONSTRUCTION, III.
PREREQUISITE--ARCH. 142. REGISTRATION IN ARCH. 233.
2 HOURS

LECT	2-4	TU TH	302 ARCH	HODGE

ARCH 247 STRUCTURAL PLANNING.
PREREQUISITE--ARCH. 257.
3 HOURS

LECT-DISC	10-12	TU TH S	302 ARCH	HORNBEAK

COURSES IN ART APPRECIATION AND THE HISTORY OF ART.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 321 TWENTIETH CENTURY ART--1900-1925
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 UNIT
LECT A 8 MTUWTHFS 62 K M ROOS

ART

DEPARTMENT OFFICE 143 FAB

PROFESSIONAL AND STUDIO COURSES

COURSES FOR UNDERGRADUATES

ART 101 WATER COLOR. I.
PREREQUISITE--FOR ART STUDENTS. ART 118 AND 120. FOR OTHERS. CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 1-5 M W F 209 F A B HOGAN

ART 102 WATER COLOR. II.
PREREQUISITE--ART 101.
2 HOURS
LAB A 1-5 M W F 209 F A B HOGAN

ART 105 INTRODUCTION TO WATER COLOR PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS CREDIT.
*2 HOURS
LAB A 1-5 M W F 209 F A B HOGAN

ART 106 INTRODUCTION TO OIL PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
LAB A 8-12 M W F 9 F A B DONOVAN

ART 117 DRAWING. I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
3 HOURS
LAB A 10-1 MTUWTHFS 236 F A B HULT

ART 118 DRAWING. II.
PREREQUISITE--ART 117. OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
2 HOURS
LAB A 10-12 MTUWTHFS 236 F A B HULT

ART 119 DESIGN. I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
2 HOURS
LAB A 8-10 MTUWTHFS 327 F A B BRADSHAW

ART 120 DESIGN. II.
PREREQUISITE--ART 119. OPEN ONLY TO STUDENTS IN COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
3 HOURS
LAB A 7-10 MTUWTHFS 327 F A B BRADSHAW

ART 125 LIFE DRAWING, I.
PREREQUISITE--ART 118.
2 HOURS

LAB	A	1-5	M W F	336	F A B	SHIPLEY

ART 126 LIFE DRAWING, II.
PREREQUISITE--ART 125.
2 HOURS

LAB	A	1-5	M W F	336	F A B	SHIPLEY

ART 127 DRAWING III.
PREREQUISITE--ART 118.
3 HOURS

LAB	A	1-5	M W F	336	F A B	SHIPLEY
	A	1-4	TU TH	336	F A B	SHIPLEY

ART 128 DRAWING IV.
PREREQUISITE--ART 127.
3 HOURS

LAB	A	1-5	M W F	336	F A B	SHIPLEY
	A	1-4	TU TH	336	F A B	SHIPLEY

ART 131 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	8-12	TU TH S	209	F A B	BRITSKY

ART 132 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 131.
2 HOURS

LAB	A	8-12	TU TH S	209	F A B	BRITSKY

ART 141 STILL LIFE, I.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	8-12	M W F	9	F A B	DONOVAN

ART 142 STILL LIFE, II.
PREREQUISITE--ART 141.
2 HOURS

LAB	A	8-12	M W F	9	F A B	DONOVAN

ART 150 SCULPTURE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

LAB	A	9-1	TU TH S	39	F A B	MAJOROWICZ

ART 151 SCULPTURE, I.
PREREQUISITE--ART 118, 120.
2 HOURS

LAB	A	9-1	TU TH S	39	F A B	MAJOROWICZ

ART 152 SCULPTURE, II.
PREREQUISITE--ART 151.
2 HOURS

LAB	A	9-1	TU TH S	39	F A B	MAJOROWICZ

ART 183 FREEHAND DRAWING, III.
PREREQUISITE--ART 182.
2 HOURS

LAB	A	1-5	M W F	209	F A B	HOGAN

ART 184 FREEHAND DRAWING, IV.
PREREQUISITE--ART 183.
2 HOURS

LAB	A	1-5	M W F	209	F A B	HOGAN

ART 190 RECREATIONAL CRAFTS. I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

LAB	A	2-5	MTUWTH	106	F A B	BRIGGS

ART 191 RECREATIONAL CRAFTS. II.
PREREQUISITE--ART 190.
2 HOURS

LAB	A	2-5	MTUWTH	106	F A B	BRIGGS

ART 192 METALWORK AND JEWELRY. I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

LAB	A	9-1	TU TH S	24	D K H	VON NEUMANN

ART 193 METALWORK AND JEWELRY. II.
PREREQUISITE--ART 192.
2 HOURS

LAB	A	9-1	TU TH S	24	D K H	VON NEUMANN

ART 194 POTTERY. I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

LAB	A	9-1	M W F	23	D K H	FRITH

ART 195 POTTERY. II.
PREREQUISITE--ART 194.
2 HOURS

LAB	A	9-1	M W F	23	D K H	FRITH

COURSES FOR ADVANCED UNDERGRADUATES

ART 203 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS
*FOR NON-ART STUDENTS ONLY.

LAB	*A	2-5	MTUWTH	106	F A B	BRIGGS

ART 204 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS

LAB	A	2-5	MTUWTH	106	F A B	BRIGGS

ART 225 INTERMEDIATE DRAWING. I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS

LAB	A	1-5	M W F	336	F A B	SHIPLEY

ART 226 INTERMEDIATE DRAWING. II.
PREREQUISITE--ART 225.
2 HOURS

LAB	A	1-5	M W F	336	F A B	SHIPLEY

ART 231 INTERMEDIATE COMPOSITION. I.
PREREQUISITE--ART 132.
3 HOURS

LAB	A	2-6	M W F	308	F A B	DOOLITTLE
	A	2-5	TU TH	308	F A B	DOOLITTLE

ART 232 INTERMEDIATE COMPOSITION. II.
PREREQUISITE--ART 231.
3 HOURS

LAB	A	2-6	M W F	308	F A B	DOOLITTLE
	A	2-5	TU TH	308	F A B	DOOLITTLE

ART 243 FIGURE PAINTING. I.
PREREQUISITE--JUNIOR STANDING IN ART
2 HOURS

LAB	A	2-6	M W F	308	F A B	DOOLITTLE

ART 244 FIGURE PAINTING. II.
PREREQUISITE--ART 243.
2 HOURS
LAB A 2-6 M W F 308 F A B DOOLITTLE

ART 251 ADVANCED SCULPTURE. I.
PREREQUISITE--ART 152.
2 HOURS
LAB A 9-1 TU TH S 39 F A B MAJOROWICZ

ART 252 ADVANCED SCULPTURE. II.
PREREQUISITE--ART 251.
2 HOURS
LAB A 9-1 TU TH S 39 F A B MAJOROWICZ

ART 281 FREEHAND DRAWING. V.
PREREQUISITE--ART 184.
2 HOURS
LAB A 1-5 M W F 311 F A B PERLMAN

ART 282 FREEHAND DRAWING. VI.
PREREQUISITE--ART 281.
2 HOURS
LAB A 1-5 M W F 311 F A B PERLMAN

ART 292 INTRODUCTION TO METAL DESIGN IN JEWELRY.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS
LAB A 9-1 TU TH S 24 D K H VON NEUMANN

ART 293 DEVELOPMENT OF METAL DESIGN IN JEWELRY.
PREREQUISITE--ART 292.
3 HOURS
LAB A 9-1 TU TH S 24 D K H VON NEUMANN

ART 294 CERAMIC DESIGN. I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS
LAB A 9-1 M W F 23 D K H FRITH

ART 295 CERAMIC DESIGN. II.
PREREQUISITE--ART 294.
3 HOURS
LAB A 9-1 M W F 23 D K H FRITH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 332 DRAWING.
PREREQUISITE--ART 126 OR EQUIVALENT. FOR GRADUATE STUDENTS. CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE.
2 HOURS. OR 1/2 TO 1 UNIT
LAB A ARR 336 F A B SHIPLEY

ART 333 PAINTING.
PREREQUISITE--ART 142 OR EQUIVALENT. FOR GRADUATE STUDENTS. CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M. F. A. IN PAINTING.
*COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS.
*2 HOURS. OR 1/2 TO 1 UNIT
LAB A ARR 308 F A B DOOLITTLE

COURSES FOR GRADUATES

ART 491 SPECIAL PROBLEMS.
1 TO 2 UNITS
LAB A 2-5 MTUWTH GRAD STUDIO ZIROLI

ART 495 PAINTING LABORATORY.
1 TO 2 UNITS
LAB A 2-5 MTUWTH GRAD STUDIO ZIROLI

ASTRONOMY

DEPARTMENT OFFICE 108A OBSERVATORY

MAJOR--TWENTY HOURS IN ASTRONOMY.

MINOR--TWENTY HOURS WHICH MUST INCLUDE PHYSICS 106, 107, AND 108. THE REMAINING EIGHT HOURS MAY BE TAKEN IN PHYSICS OR IN ONE OF THE FOLLOWING SUBJECTS--CHEMISTRY, GEOLOGY, MATHEMATICS, PHILOSOPHY. IF TWO SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

INDIVIDUAL INSTRUCTION IS PROVIDED FOR SUPERIOR UNDERGRADUATE STUDENTS AT HOURS TO BE ARRANGED.

COURSES FOR GRADUATES

ASTR 499 THESIS RESEARCH
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

AVIATION

DEPARTMENT OFFICE 318 C E H

COURSES OFFERED BY THE INSTITUTE OF AVIATION ARE OPEN TO STUDENTS AND FACULTY IN ALL DEPARTMENTS OF THE UNIVERSITY, SUBJECT TO LIMITATIONS IMPOSED BY THE AVAILABILITY OF SPACE AND EQUIPMENT. CREDIT FOR INSTITUTE OF AVIATION COURSES IS GENERAL UNIVERSITY CREDIT. HOWEVER, ITS USE AS CREDIT TOWARD GRADUATION IS A MATTER FOR EACH COLLEGE TO PASS UPON. COURSES IN THE 150, 160, AND 170 SERIES ORDINARILY GIVE CREDIT ONLY IN THE INSTITUTE OF AVIATION.

THE FEE FOR EACH INSTITUTE OF AVIATION FLIGHT COURSE IS $350. BUS TRANSPORTATION TO AND FROM THE AIRPORT FOR AVIATION STUDENTS IS PROVIDED BY THE INSTITUTE WITHOUT CHARGE. ARRANGEMENTS FOR THE PHYSICAL EXAMINATION FOR STUDENTS IN AVI. 101 ARE MADE BY THE INSTITUTE THROUGH THE UNIVERSITY HEALTH SERVICE UPON FINAL ACCEPTANCE IN THE PRIVATE PILOT COURSE AT REGISTRATION TIME. STUDENTS IN AVI. 104 ARE REQUIRED TO POSSESS A SECOND-CLASS F.A.A. MEDICAL CERTIFICATE DATED WITHIN THE PRECEDING TWELVE CALENDAR MONTHS.

STUDENTS ARE CAUTIONED THAT ALL TIMES AT THE AIRPORT LISTED IN THE FOLLOWING SCHEDULES REFER TO AIRBORNE TIME AND THAT A MINIMUM OF 30 MINUTES MUST BE ALLOWED FOR TRAVELING TO THE AIRPORT PRIOR TO EACH FLIGHT AND FOR RETURNING TO THE CAMPUS AFTER EACH FLIGHT. THE BUS SCHEDULE AND ROUTE FROM AIRPORT TO CAMPUS IS LISTED SEPARATELY, IMMEDIATELY FOLLOWING THE COURSE LISTINGS.
FOR CONVENIENCE IN ARRANGING PROGRAM CARDS SO THAT TRAVEL TIME TO AND FROM THE AIRPORT WILL NOT CAUSE OVERLAPPING OF CLASSES, THE BUS SCHEDULE IS COMBINED WITH THE FLIGHT SECTION TIMES AS FOLLOWS-THE COLUMN LABELED--LEAVE CAMPUS--INDICATES THE TIME THE BUS DEPARTS FOR THE AIRPORT, THE COLUMN LABELED--HOURS--INDICATES AIRBORNE TIME FROM GROUND TO GROUND. THE COLUMN LABELED--ARRIVE CAMPUS--LISTS THE TIME STUDENTS MAY EXPECT TO BE BACK ON THE CAMPUS.

COURSES FOR UNDERGRADUATES

AVI 102 AND 103, OR 103 AND 104, OR 104 AND 205 MAY BE TAKEN CONCURRENTLY BY SPECIAL PERMISSION.

AVI 101 PRIVATE PILOT.
3 HOURS
LECT-DISC 745-845 MTUWTHF 111 AERO LAB B HAAK
THE FOLLOWING FLIGHT SECTIONS ARE AVAILABLE FOR AVI. 101 STUDENTS WITH THE EXCEPTION OF A2--

FLIGHT	HOURS	DAYS	LEAVE CAMPUS	ARRIVE CAMPUS	INSTRUCTOR
A2	8.00- 9.00	MTUWTHFS	7.25 A.M.	9.50 A.M.	BENN AND STAFF
A3	9.20-10.20	MTUWTHFS	8.50	10.50	
A4	10.40-11.40	MTUWTHFS	10.00	12.50 P.M.	
A5	12.20- 1.20	MTUWTHF	11.50	1.55	
A6	1.40- 2.40	MTUWTHF	1.05 P.M.	3.25	
A7	3.00- 4.00	MTUWTHF	2.20	4.50	
A8	4.30- 5.30	MTUWTHF	3.55	6.00	

AVI 102 SECONDARY FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS
LECT-DISC 1050-1150 MTUWTHF 111 AERO LAB B TRULOCK
THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 102 STUDENTS WITH THE EXCEPTION OF FLIGHT A4.
GORDON AND STAFF

AVI 103 INTERMEDIATE FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS
LECT-DISC 12 MTUWTHF 111 AERO LAB B HAAK

FLIGHT	HOURS	DAYS	LEAVE CAMPUS	ARRIVE CAMPUS	INSTRUCTOR
A1	7.45-11.30	M TH	7.30 A.M.	11.45 A.M.	GORDON AND
A2	1.40- 5.40	M TH	1.10 P.M.	5.55 P.M.	STAFF
A3	7.45-11.30	TU F	7.30 A.M.	11.45 A.M.	
A4	1.40- 5.40	TU F	1.10 P.M.	5.55 P.M.	
A5	7.45-11.30	W S	7.30 A.M.	11.45 A.M.	

AVI 104 ADVANCED FLIGHT.
PREREQUISITE--AVI. 102 AND 103, CONSENT OF DIRECTOR.
3 HOURS
LECT-DISC A 11 MTUWTHF 423 C E H HAAK
LECT-DISC B 1 MTUWTHF 111 AERO LAB B HAAK
THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 104 STUDENTS.
GORDON AND STAFF

COURSES FOR ADVANCED UNDERGRADUATES

AVI 205 FLIGHT INSTRUCTOR.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS
LECT-DISC 1040-1140 MTUWTHF AIRPORT ANDERSON
THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 205 STUDENTS WITH THE EXCEPTION OF FLIGHT A4.
ANDERSON AND STAFF

AVI 206 BASIC INSTRUMENT FLIGHT TECHNIQUES.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE. OR EQUIVALENT FLIGHT EXPERIENCE. JUNIOR STANDING. CONSENT OF DIRECTOR.
3 HOURS
LECT-DISC 745-845 MTUWTHF 423 C E H ANDERSON
THE SAME FLIGHT SECTIONS LISTED UNDER AVI. 101 ARE AVAILABLE FOR AVI. 206 STUDENTS WITH THE EXCEPTION OF FLIGHT A2.
ANDERSON AND STAFF

AVI 291 SPECIAL RATING--MULTI-ENGINE SEA.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE. CONSENT OF DIRECTOR.
1 HOUR
LAB-DISC ARR AIRPORT STONECIPHER AND STAFF

AVI 292 SPECIAL RATING--MULTI-ENGINE LAND.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE. CONSENT OF DIRECTOR.
1 HOUR
LAB-DISC ARR AIRPORT STONECIPHER AND STAFF

BUS SCHEDULE AND ROUTE

THE INSTITUTE OF AVIATION BUS MAKES REGULAR TRIPS BETWEEN THE AIRPORT AND THE CAMPUS BEGINNING ON THE FIRST DAY OF CLASSES AND CONTINUING THROUGH THE LAST DAY OF FINAL EXAMINATIONS. THE BUS LEAVES FROM THE CAMPUS PARKING SPOT AT THE NORTHEAST CORNER OF AERO LAB B. AND MAKES REGULAR STOPS ON THE WAY TO THE AIRPORT AT THE CORNERS OF WRIGHT AND ARMORY STREETS. FOURTH AND GREGORY STREETS AND FIRST AND GREGORY STREETS. THE TRIP FROM THE AIRPORT BACK TO THE CAMPUS IS VIA GREGORY STREET AND GOODWIN AVENUE TO THE PARKING SPOT. THE SCHEDULE IS AS FOLLOWS--

LEAVE CAMPUS	ARRIVE AIRPORT	LEAVE AIRPORT	ARRIVE CAMPUS
7.25 A.M.	7.45 A.M.	7.50 A.M.	8.10 A.M.
8.50	9.10	9.30	9.50
10.00	10.20	10.30	10.50
11.05	11.25	11.30	11.50
11.50	12.10 P.M.	12.30 P.M.	12.50 P.M.
1.05 P.M.	1.25	1.35	1.55
2.20	2.40	3.05	3.25
3.55	4.15	4.30	4.50
5.00	5.20	5.40	6.00

AVIATION
AIRCRAFT MAINTENANCE

COURSES FOR UNDERGRADUATES

AVI 161 AIRPORT SHOP MANAGEMENT.
3 HOURS
LECT-DISC 920-1010 MTUWTHF AIRPORT BAILEY

AVI 168 PROBLEMS OF AIRCRAFT MAINTENANCE.
PREREQUISITE--SOPHOMORE STANDING.
2 HOURS
LECT-DISC 8-10 TU F AIRPORT APPLEGATE

BANDS

DEPARTMENT OFFICE 140 BAND

THE SUMMER SESSION BAND IS OPEN TO STUDENTS WHO HAVE BEEN MEMBERS OF THE UNIVERSITY BANDS DURING THE ACADEMIC YEAR, AND TO OTHER STUDENTS, BOTH MEN AND WOMEN, WHO MAY QUALIFY BY PLAYING EXAMINATION. FINAL SELECTION OF MEMBERSHIP IS BY INSTRUMENTATION AND PROFICIENCY. CANDIDATES SHOULD REPORT TO THE BANDS OFFICE, 140 BAND BUILDING, DURING THE REGISTRATION PERIOD FOR ENROLLMENT AND/OR APPOINTMENTS FOR AUDITIONS. REHEARSALS WILL BE HELD FROM 7.15 TO 8.45 P.M. MONDAY AND WEDNESDAY IN THE BAND BUILDING, AND A SERIES OF TWILIGHT CONCERTS WILL BE SCHEDULED.
MR. EVERETT KISINGER.

BIOPHYSICS

DEPARTMENT OFFICE 524 BURRILL HALL

COURSES FOR GRADUATES

BIOPH 410 SPECIAL TOPICS IN BIOPHYSICS.
PREREQUISITE--BIOPH. 401 OR EQUIVALENT. BIOPH. 402 AND 403.
1/2 TO 1 UNIT
CONF ARR STAFF

BIOPH 411 SEMINAR
PREREQUISITE--ENROLLMENT IN THE BIOPHYSICS PROGRAM OR CONSENT OF INSTRUCTOR.
1/2 UNIT
CONF ARR STAFF

BIOPH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

BOTANY

DEPARTMENT OFFICE 208 N H

MAJOR--TWENTY HOURS OF BOTANY, EXCLUDING BOT. 100, D G S 131, 132, AND BIOL. SCI. 100, AND INCLUDING BOT. 120, OR 302 OR 303 OR 304, 160, AND 330, AND AT LEAST FIVE HOURS IN OTHER COURSES LISTED FOR ADVANCED UNDERGRADUATES AND GRADUATES.

MINORS--TWENTY HOURS IN ONE OR TWO SUBJECTS CHOSEN IN CONSULTATION WITH THE CHAIRMAN OF THE DEPARTMENT FROM THE FOLLOWING--AGRONOMY, CHEMISTRY, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, HORTICULTURE, MATHEMATICS MICROBIOLOGY, PHYSICS, PHYSIOLOGY, PLANT PATHOLOGY, AND ZOOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

IF HORTICULTURE IS CHOSEN AS A MINOR, NOT MORE THAN TEN HOURS MAY BE COUNTED. THE TEN HOURS MAY BE CHOSEN FROM HORT. 100, 110, 121, 201, 230 OR 233, 242, 262, 307 OR 308, 321 OR 322, 367, AND 382.

COURSES FOR ADVANCED UNDERGRADUATES

BOT 293 HONORS.
PREREQUISITE--FIFTEEN HOURS OF BOTANY. SENIOR STANDING.
2 HOURS

CONF	ARR							STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

BOT 300 INDIVIDUAL TOPICS.
PREREQUISITE--BOT. 100. TEN HOURS OF ADVANCED WORK IN BOTANY OR ANOTHER BIOLOGICAL SCIENCE. SENIOR STANDING.
2 TO 5 HOURS. OR 1/4 OR 1/2 UNIT

CONF	ARR							STAFF

BOT 304 GENERAL PLANT MORPHOLOGY.
PREREQUISITE--BOT. 100 OR D.G.S. 131 AND 132. OR EQUIVALENT. SENIOR STANDING OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN BOT. 302 OR BOT. 303
*3 OR 5 HOURS. OR 1/2 OR 1 UNIT

LAB-DISC	8-10	MTUWTHFS		201	H	H		CAROTHERS

BOT 366 FIELD BOTANY.
PREREQUISITE--ONE COURSE IN BOTANY. CONSENT OF INSTRUCTOR.
3 OR 5 HOURS. OR 1/2 OR 1 UNIT
FIELD WORK TWO HOURS TO BE ARRANGED

LAB-DISC	1-3	MTUWTHF		258	N	H	B	SMITH

BOT 381 PLANT ECOLOGY.
PREREQUISITE--BOT. 160 OR EQUIVALENT.
FIELD TRIPS.
5 HOURS. OR 1 UNIT

LECT-DISC	9	MTUWTHF		204	N	H	B	BLISS
LAB	8-4		S	204	N	H	B	

COURSES FOR GRADUATES

BOT 493 ADVANCED STUDIES IN BOTANY.
1/2 TO 2 UNITS

A--ANATOMY--PLANT	CAROTHERS. PAOLILLO
B--CYTOGENETICS	STEFFENSEN
C--CYTOLOGY	STEFFENSEN
D--ECOLOGY--PLANT	BLISS
E--GENETICS--PLANT	LAUGHNAN
F--MORPHOLOGY--HIGHER VASCULAR PLANTS	CAROTHERS. PAOLILLO
G--MORPHOLOGY--PRIMITIVE VASCULAR PLANTS	STEWART
H--MYCOLOGY	ROGERS
I--PALEOBOTANY	STEWART. PHILLIPS
J--PHOTOSYNTHESIS	GOVINDJEE. RABINOWITCH
K--PHYCOLOGY	HOFFMAN
L--PHYSIOLOGY--PLANT	NANCE. STERN
M--TAXONOMY OF BRYOPHYTES	JONES
N--TAXONOMY OF VASCULAR PLANTS	JONES. SMITH
O--VIROLOGY--PLANT	BLACK

LAB	ARR							STAFF

BOT 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

LAB	ARR							STAFF

BUSINESS

DEPARTMENT OFFICE 226 D K H

COURSES FOR GRADUATES

BUS 499 THESIS RESEARCH
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
LECT-DISC ARR BELL

BUSINESS ADMINISTRATION

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION--214 DAVID KINLEY HALL

COURSES FOR GRADUATES

B ADM 511 PRODUCTION. I.
PREREQUISITE--ENROLLMENT IN GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT
DISC 10-12 MTU 212 D K H
8-10 WTH 212 D K H

B ADM 515 BUSINESS ORGANIZATION.
PREREQUISITE--B.ADM. 510 OR EQUIVALENT.
3/4 UNIT
DISC 10-12 WTH 212 D K H
8-10 FS 212 D K H

B ADM 554 FINANCIAL ANALYSIS.
PREREQUISITE--ENROLLMENT IN THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT
DISC 8-10 MTU 212 D K H
10-12 FS 212 D K H

B ADM 590 INDEPENDENT STUDY AND RESEARCH.
1/2 OR 1 UNIT
DISC ARR

B ADM 599 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
DISC 1-3 W F 205 D K H

BUSINESS EDUCATION

DEPARTMENT OFFICE 9 D K H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ED 352 IMPROVEMENT OF INSTRUCTION IN TYPEWRITING.
PREREQUISITE--SIXTEEN HOURS IN COMMERCE. INCLUDING B. ED. 203 AND SIXTEEN HOURS IN EDUCATION. INCLUDING ED. 242.
2 HOURS. OR 1/2 UNIT
*SECTION A MEETS THE FIRST FOUR WEEKS
LECT-DISC *A 10-12 TUWTHF 10 D K H REED

B ED 382 ORGANIZATION AND ADMINISTRATION OF COOPERATIVE PART-TIME PROGRAMS IN BUSINESS EDUCATION.
PREREQUISITE--SIXTEEN HOURS IN EDUCATION. SIXTEEN HOURS IN COMMERCE. CONSENT OF INSTRUCTOR.
4 HOURS. OR 1 UNIT
LECT-DISC A 3-5 TU TH 8 D K H MASON

COURSES FOR GRADUATES

SEE ED 459--FAMILY FINANCE SECTION
SEE ED 459--AUTOMATION SECTION

B ED 490 SPECIAL TOPICS.
1/2 OR 1 UNIT
CONF ARR MASON

B ED 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN BUSINESS EDUCATION.
1/2 TO 2 UNITS
CONF ARR MASON

BUSINESS LAW

DEPARTMENT OFFICE 431 D K H

COURSES FOR UNDERGRADUATES

B LAW 100 BASIC PRINCIPLES OF BUSINESS LAW.
PREREQUISITE--ACCY. 105. ECON. 102. FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN FOR B. LAW 100 IN ADDITION TO B. LAW 201 OR 261
*3 HOURS
LECT-DISC A 8 MTUWTHFS 325 D K H CORLEY

COURSES FOR ADVANCED UNDERGRADUATES

B LAW 261 SUMMARY OF BUSINESS LAW.
FOR NON-COMMERCE STUDENTS WHO HAVE AT LEAST JUNIOR STANDING.
*CREDIT IS NOT GIVEN FOR B. LAW. 261 IN ADDITION TO B. LAW. 100 OR 201.
*3 HOURS
LECT-DISC 8 MTUWTHFS 325 D K H CORLEY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B LAW 301 THE LAW OF SECURITY TRANSACTIONS AND BANKING.
PREREQUISITE--SENIOR STANDING. B. LAW. 100. OR CREDIT OR REGISTRATION IN B. LAW. 202.
3 HOURS. OR 3/4 OR 1 UNIT
LECT-DISC C 10 MTUWTHFS 325 D K H ROBERTS

CERAMIC ENGINEERING

DEPARTMENT OFFICE 204 CER

COURSES FOR GRADUATES

CER E 495 MATERIALS AND SPECIAL PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
1 OR 2 UNITS
CONF ARR STAFF

CER E 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

CHEMISTRY AND CHEMICAL ENGINEERING

DEPARTMENT OFFICE 108 N L

MAJOR--NOT LESS THAN TWENTY HOURS IN CHEMISTRY, EXCLUDING CHEM. 101, 102, 104, 105, 107, 108, 109, AND 111. ONE SEMESTER OF BASIC WORK IN EACH OF THE FOLLOWING AREAS MUST BE INCLUDED--QUANTITATIVE ANALYSIS, ORGANIC CHEMISTRY, AND PHYSICAL CHEMISTRY. IN ADDITION THERE MUST BE INCLUDED TWO APPROVED 300 LEVEL COURSES, ONE IN EACH OF TWO AREAS OF CHEMISTRY. THESE TWO COURSES MUST HAVE THE APPROVAL OF THE DEPARTMENTAL ADVISER. IT IS VERY DESIRABLE THAT THE STUDENT PLAN HIS COURSE WORK AS EARLY AS POSSIBLE IN CONSULTATION WITH HIS ADVISER.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CERAMIC ENGINEERING, ENTOMOLOGY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHILOSOPHY, PHYSICS, PHYSIOLOGY, PSYCHOLOGY, AND ZOOLOGY. WITH THE WRITTEN APPROVAL OF THE DEPARTMENTAL ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED.

DEPARTMENTAL DISTINCTION--STUDENTS IN CHEMISTRY REGISTERED IN CHEM. 290--THESIS--OR STUDENTS IN CHEMICAL ENGINEERING REGISTERED IN CH. E. 290--THESIS--OR 379--PROJECTS--OR 381--PLANT DESIGN--BECOME CANDIDATES FOR DEPARTMENTAL DISTINCTION. ALL STUDENTS ARE ELIGIBLE FOR COLLEGE HONORS WHO HAVE A 4.0 AVERAGE OR BETTER. THE LEVEL OF DISTINCTION TO BE RECOMMENDED IS DETERMINED BY THE QUALITY OF THE SPECIAL WORK DONE IN ADDITION TO THE REQUIREMENT THAT THE OVER-ALL GRADE-POINT AVERAGES, EXCLUSIVE OF MILITARY TRAINING AND PHYSICAL EDUCATION, OF A 4.0, 4.25, AND 4.5 ARE REQUIRED FOR THE CITATIONS OF DISTINCTION, HIGH DISTINCTION, AND HIGHEST DISTINCTION; RESPECTIVELY RECOMMENDATION IS MADE TO THE DEAN OF THE COLLEGE BY THE HEAD OF THE DEPARTMENT.

SEQUENCE OF COURSES--STUDENTS IN THE CURRICULUM IN CHEMISTRY, MAJORS IN CHEMISTRY, AND ALL OTHERS WHO DESIRE A THOROUGH TRAINING IN THE FUNDAMENTALS OF CHEMISTRY AND THEIR APPLICATIONS TO MODERN LIFE SHOULD SELECT COURSES FROM THE FOLLOWING, USUALLY IN THE SEQUENCE GIVEN--CHEM. 107, 108, 234, 336, 342, 343, 344, 345, 321, 315, AND COURSES IN BIOCHEMISTRY, CHEMICAL ENGINEERING, ANALYTICAL, INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY. STUDENTS WHO DO NOT MEET THE REQUIREMENTS OF PREVIOUS HIGH SCHOOL CHEMISTRY AND THE THOROUGH MATHEMATICS BACKGROUND NECESSARY FOR REGISTRATION IN CHEM. 107, MAY REGISTER IN CHEM. 101 OR 102 BEFORE TAKING THE SEQUENCE CHEM. 107 AND 108. STUDENTS IN THE COLLEGE OF ENGINEERING--EXCEPT CERAMISTS, CERAMIC ENGINEERS, AND THOSE WHO WISH TO TAKE CHEM. 342--SHOULD REGISTER IN CHEM. 101 OR 102, 104, 123, OR IN 109 AND 123.

STUDENTS WHO WISH TO SATISFY A LIMITED CHEMISTRY REQUIREMENT MAY REGISTER FOR THE SEQUENCE CHEM. 101 OR 102, 105, 122, 132, OR 133. STUDENTS WITH EXCEPTIONALLY GOOD RECORDS MAY TAKE 109 INSTEAD OF 102 AND 105.
BIOCHEMISTRY--STUDENTS WHO WISH TO SPECIALIZE IN BIOCHEMISTRY ARE DIRECTED TO THE CHEMISTRY CURRICULUM OR TO A STRONG CHEMISTRY MAJOR PROGRAM. SUCH STUDENTS SHOULD PLAN THEIR PROGRAMS SO AS TO INCLUDE, IN ADDITION TO CHEMISTRY AND BIOCHEMISTRY, BASIC COURSES IN MATHEMATICS, THROUGH CALCULUS, AND PHYSICS, THROUGH PHYSICS 108, AND A YEAR OF ADVANCED UNDERGRADUATE BIOLOGY. STUDENTS IN RELATED FIELDS WISHING TO TAKE UNDERGRADUATE COURSES IN BIOCHEMISTRY ARE URGED TO PLAN THEIR PROGRAMS SO AS TO PROVIDE AN EQUIVALENT BACKGROUND. STUDENTS ARE ENCOURAGED TO DISCUSS THEIR PROGRAMS WITH THE STAFF OF THE DIVISION OF BIOCHEMISTRY OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING.

RESTRICTIONS--STUDENTS IN THE CURRICULA OF CHEMISTRY OR CHEMICAL ENGINEERING MUST HAVE AT LEAST A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION. IN ORDER TO BE ACCEPTED BY THE DEPARTMENT AS JUNIORS OR SENIORS. A TRANSFER STUDENT TO BE ACCEPTED MUST HAVE A CORRESPONDING RECORD IN THE INSTITUTION OR INSTITUTIONS FROM WHICH HE TRANSFERS AND MUST MAINTAIN A SIMILAR AVERAGE AT THE UNIVERSITY OF ILLINOIS. WITH THE EXCEPTION OF STUDENTS IN THE COLLEGE OF ENGINEERING AND THE COLLEGE OF AGRICULTURE, REGISTRATION OF STUDENTS IN CHEMISTRY COURSES EXCEPT THOSE OF FRESHMAN AND SOPHOMORE GRADE, NAMELY, CHEM. 101, 102, 104, 105, 107, 108, 109, 111, 122, 123, 132, 133, NORMALLY IS RESTRICTED TO STUDENTS HAVING A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, OR AN AVERAGE OF AT LEAST 3.5 IN CHEMISTRY COURSES. ANY JUNIOR OR SENIOR WHO CANNOT MEET EITHER OF THESE REQUIREMENTS MUST PETITION FOR ADMITTANCE AS A MAJOR OR MINOR IN CHEMISTRY.

CHEMISTRY

COURSES FOR UNDERGRADUATES

CHEM 101 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL PHYSICS, OR TWO AND ONE-HALF UNITS OF HIGH SCHOOL MATHEMATICS, OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT	2	MTUWTH	112	C	A
QUIZ	1	MTUWTH	8	C	A
LAB	10-12	MTUWTH	201	C	A

CHEM 102 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL CHEMISTRY OR EQUIVALENT, 2 1/2 UNITS OF HIGH SCHOOL MATHEMATICS OR CREDIT IN MATH. 111 OR 112.
*TWO HOURS CREDIT FOR SENIORS.
*3 HOURS

LECT	2	MTUWTH	112	C	A
QUIZ	1	MTUWTH	201	N	L
LAB	10-12	TU TH	201	C	A

CHEM 122 ELEMENTARY QUANTITATIVE ANALYSIS.
FOR ALL STUDENTS IN HOME ECONOMICS AND PREMEDICAL COURSES AND ALL OTHERS WHO HAVE NOT FOLLOWED THE SEQUENCE CHEM. 101 OR 102, 107 AND 108.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

LECT	8	MTUWTHF	201	N	L	BROWNLEE
QUIZ	8	W S	201	N	L	
LAB	9-12	MTUWTHFS	301	C	A	

CHEM 123 QUANTITATIVE ANALYSIS FOR ENGINEERS.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

LECT	8	MTU THF	201	N	L	BROWNLEE
QUIZ	8	W S	201	N	L	
LAB	9-12	MTUWTHFS	301	C	A	

CHEM 132 ELEMENTARY ORGANIC CHEMISTRY.
PREREQUISITE--CHEM. 101. 102. 109. OR EQUIVALENT.
3 HOURS

LECT	8	TUWTHF	217	N L		BALDWIN
QUIZ	1	TU TH	161	N L		
LAB	2-5	TU TH	467	N L		

CHEM 133 ELEMENTARY ORGANIC CHEMISTRY.
FOR STUDENTS IN AGRICULTURAL SCIENCE. DAIRY TECHNOLOGY. FOOD TECHNOLOGY. NUTRITION. DIETETICS. AND PREMEDICAL. PREDENTAL AND PREVETERINARY COURSES. PREREQUISITE--CHEM. 105 OR 109.
5 HOURS

LECT	9	MTU THF	112	C A	
QUIZ	9	W S	112	C A	
CONF	1	W F	103	N L	
LAB	2-5	W F	467	N L	
	1-5	M	467	N L	

COURSES FOR ADVANCED UNDERGRADUATES

CHEM 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMISTRY CURRICULUM
PREREQUISITE--MAJORS IN CHEMISTRY IN THE GENERAL CURRICULUM MAY REGISTER IF THEY HAVE COMPLETED A MINIMUM OF TWENTY-THREE HOURS OF CHEMISTRY. WHICH MUST INCLUDE AT LEAST FIVE HOURS FROM THE COURSES FOR ADVANCED UNDERGRADUATES. OTHER STUDENTS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT WHO DESIRES TO DO RESEARCH MUST RECEIVE SPECIAL WRITTEN PERMISSION FROM THE INSTRUCTOR UNDER WHOM HE WISHES TO WORK. SUCH WRITTEN PERMISSION SHOULD BE PRESENTED. AT THE TIME OF REGISTRATION. TO THE ADVISER FOR THE CHEMISTS. EACH STUDENT TAKING THIS COURSE MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. IN ORDER TO RECEIVE CREDIT A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CHEM. 290.
2 TO 6 HOURS

CONF	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CHEM 315 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN PHYSICAL CHEMISTRY.
3 HOURS. OR 3/4 UNIT

LECT	11	MTUWTHF	161	N L	
	4	TU	161	N L	

CHEM 316 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN CHEM. 315.
2 HOURS. OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

CONF	4	TH	8	C A	
LAB	*1-4	M F	305	N L	

CHEM 321 CHEMICAL AND INSTRUMENTAL ANALYSIS.
PREREQUISITE--CHEM. 336. AND 340 OR 342 WITH CONCURRENT REGISTRATION IN CHEM. 343 AND 344.
5 HOURS. OR 3/4 OR 1 1/4 UNITS

LECT		8	MTUWTHFS	161	N L	
LAB	A	9-12	MTUW	315	N L	
	A	1-5	MTU	315	N L	
LAB	B	1-4	W	315	N L	
	B	9-12	THF	315	N L	
	B	1-5	THF	315	N L	

CHEM 338 SYSTEMATIC IDENTIFICATION OF ORGANIC COMPOUNDS.
PREREQUISITE--CHEM. 336 AND 337. OR EQUIVALENT.
3 HOURS. OR 3/4 UNIT

CONF	8	M W F	8	C A	
	1	M	103	N L	
LAB	1-6	TU TH	218	N L	

CHEM 342 PHYSICAL CHEMISTRY.
PREREQUISITE--CHEM. 108, 122, 123, OR EQUIVALENT, PHYCS. 106, 107, AND 108, OR TWO SEMESTERS OF GENERAL PHYSICS WITH CONCURRENT REGISTRATION IN THE THIRD SEMESTER, CREDIT OR REGISTRATION IN MATH 142 OR EQUIVALENT.
3 HOURS, OR 3/4 UNIT

LECT	9	MTUWTHFS	161	N L	

CHEM 343 PHYSICAL CHEMISTRY LABORATORY, I.
PREREQUISITE--CHEM. 342.
1 HOUR, OR 1/4 UNIT

LAB	ARR		124	N L	KINSEY

CHEM 345 PHYSICAL CHEMISTRY LABORATORY, II.
PREREQUISITE--CHEM. 342, CREDIT OR REGISTRATION IN CHEM. 343 AND 344.
1 HOUR, OR 1/4 UNIT

LAB	ARR		116	N L	KINSEY

CHEM 350 GENERAL BIOCHEMISTRY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY AND CHEM. 133 OR 234, OR EQUIVALENTS, REGISTRATION IN CHEM. 355.
3 HOURS, OR 3/4 UNIT

LECT	8	MTUWTHFS	101	E C	

CHEM 355 BIOCHEMISTRY LABORATORY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY, CHEM. 133 OR 234, OR EQUIVALENT, REGISTRATION IN CHEM. 350.
3 HOURS, OR 3/4 UNIT

LAB	9-12	MTUWTHF	318	E C	

CHEM 391 SPECIAL PROBLEMS IN INTRODUCTORY CHEMISTRY.
PREREQUISITE--EXPERIENCE IN TEACHING CHEMISTRY IN HIGH SCHOOL OR JUNIOR COLLEGE.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

LECT	2	MTUWTH	112	C A	
CONF	*3	MTUWTH	8	C A	

CHEM 393 THE STATUS OF MODERN CHEMISTRY.
PREREQUISITE--EXPERIENCE IN TEACHING CHEMISTRY IN HIGH SCHOOL OR JUNIOR COLLEGE
3 HOURS, OR 3/4 OR 1 UNIT

LECT	ARR				TILBURY

COURSES FOR GRADUATES

CHEM 404 ADVANCED INORGANIC CHEMISTRY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN A 400 LEVEL LECTURE COURSE IN INORGANIC CHEMISTRY.
1/4 OR 3/4 UNIT

LAB	ARR		305	N L	

CHEM 434 ADVANCED ORGANIC SYNTHESIS.
1/2 OR 1 UNIT

LAB	ARR		218	N L	BALDWIN

CHEM 435 ORGANIC CHEMISTRY SEMINAR.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 UNIT

LECT-DISC	10	M W F	161	N L	

CHEM 449 SPECIAL TOPICS IN PHYSICAL CHEMISTRY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE CREDIT.
*1/2 OR 1 UNIT

LECT	10	MTUWTHF	101	E C	

CHEM 455 BIOCHEMISTRY SEMINAR.
REQUIRED OF GRADUATE STUDENTS WHOSE MAJOR IS BIOCHEMISTRY.
PREREQUISITE--CHEM. 350 AND 355, OR EQUIVALENT.
1/2 UNIT

LECT-DISC	10-12	TU TH	397 E C	

CHEM 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS, SUBJECT TO THE APPROVAL OF ONE OF THE QUALIFIED STAFF MEMBERS-

ANALYTICAL CHEMISTRY . . .BROWNLEE, HARTLEY, JUVET, LAITINEN, MALMSTADT, PFLUGER

BIOCHEMISTRY . . . CARTER, CLARK, GUNSALUS, HAGER, HALL, HASTINGS, RUTTER, VESTLING, WEBER, WOLD,

BIOPHYSICAL CHEMISTRY . . . DICKERSON, HALL, HASTINGS, STEINRAUF, VAN HOLDE, VESTLING, WEBER, WOLD,

INORGANIC CHEMISTRY . . . BAILAR, BROWN, DRAGO, KAY, MOELLER, PIPER, D. F. MARTIN.

ORGANIC CHEMISTRY . . . APPLEQUIST, BATES, CURTIN, FUSON, LEONARD, MARTIN, RINEHART, SMITH, SNYDER

PHYSICAL CHEMISTRY . BELFORD, DICKERSON, DRICKAMER, FLYGARE, GUTOWSKY, HALL, HUMMEL, KUPPERMANN, PHIPPS, STEINRAUF, VAN HOLDE, WALL, YANKWICH

CHEMISTRY--
APPLIED ELECTROCHEMISTRY--ORGANIC AND INORGANIC . . . SWANN

RADIOCHEMISTRY . . . . . NYSTROM, KAY, BROWNLEE, HUMMEL

RESEARCH FOR THE PH. D. IS ALSO OFFERED IN SPECIALIZED FIELDS OTHER THAN THOSE ILLUSTRATED ABOVE. STUDENTS WHO INTEND TO MAJOR IN CHEMISTRY IN ONE OF THESE SPECIAL FIELDS SHOULD CONSULT WITH THE PROFESSOR IN CHARGE OF THE THESIS AND WITH THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING IN REGARD TO THE PROGRAMS OF COURSES AND EXAMINATIONS.

CONF	ARR			STAFF

CHEMICAL ENGINEERING

COURSES FOR ADVANCED UNDERGRADUATES

CH E 267 MEASUREMENTS AND INSTRUMENTATION.
PREREQUISITE--ONE YEAR OF COLLEGE PHYSICS, CREDIT OR REGISTRATION IN MATH. 343 OR 345.
2 HOURS

CONF	1	M W	101 E C		SCHMITZ
LAB	2-6	M W	201 E C		

CH E 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMICAL ENGINEERING CURRICULUM ANY OTHERS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT.
*EACH STUDENT MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. HOWEVER, CH. E. 379 TWO HOURS, MAY BE SUBSTITUTED FOR TWO OF THE FIVE HOURS REQUIRED IN CH. E. 290. IN ORDER TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CH. E. 290.
*2 TO 6 HOURS

CONF	ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CH E 379 CHEMICAL ENGINEERING PROJECTS.
PREREQUISITE--SENIOR STANDING IN CHEMISTRY OR CHEMICAL ENGINEERING.
2 HOURS, OR 1/2 UNIT
LAB 1-6 TU TH 294 E C SCHMITZ

COURSES FOR GRADUATES

CH E 487 FLUID DYNAMICS.
PREREQUISITE--CH. E. 371, MATH. 343 OR 345, OR EQUIVALENT WITH
CONSENT OF INSTRUCTOR.
1 UNIT
LECT 11 MTUWTHFS 101 E C HANRATTY

CH E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
DRICKAMER, HANRATTY, PERLMUTTER, QUINN,
SCHMITZ, SWANN, WESTWATER
CONF ARR STAFF

CITY PLANNING

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

C P 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

CIVIL ENGINEERING

DEPARTMENT OFFICE 203 C E H

COURSES FOR ADVANCED UNDERGRADUATES

C E 207 SURVEYING CAMP.
PREREQUISITE--C. E. 101.
GIVEN IN SUMMER SURVEYING CAMP AT CAMP RABIDEAU, MINNESOTA.
5 HOURS
1 FIVE-WEEK SESSION AT CAMP RABIDEAU, BLACKDUCK,
MINNESOTA--JUNE 17 THROUGH JULY 20.

C E 262 STRUCTURAL THEORY, II.
PREREQUISITE--C. E. 261.
3 HOURS
LECT-DISC E 8 MTUWTHFS 305 C E H

C E 263 BEHAVIOR AND DESIGN OF METAL STRUCTURES, I.
PREREQUISITE--T.A.M. 224 AND C.E. 261, OR CONSENT OF INSTRUCTOR.
3 HOURS
LECT-DISC E 10 MTUWTHFS 305 C E H
LAB 2-4 TU TH 309 C E H

C E 264 REINFORCED CONCRETE DESIGN. I.
PREREQUISITE--T.A.M. 224. C.E. 214. CREDIT OR REGISTRATION IN C.E. 262.
3 HOURS
NOTE--THREE-TWO HOUR DEMONSTRATION LABORATORIES TO BE ARRANGED.
*SECTION F IS A SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 12 FOR MILITARY STUDENTS.

LECT-DISC	E	9	MTUWTHFS	305	C E H
LECT-DISC	F	ARR			

C E 290 CONTRACTS AND SPECIFICATIONS.
SAME AS G. E. 290.
PREREQUISITE--SENIOR STANDING IN ENGINEERING OR ARCHITECTURE.
3 HOURS
SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 12 FOR MILITARY STUDENTS ONLY.

LECT-DISC	E	ARR			

C E 297 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING.
1 TO 4 HOURS

CONF		ARR			

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C E 334 AIRPORT DESIGN.
PREREQUISITE--C.E. 220 AND SENIOR STANDING IN CIVIL ENGINEERING. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	E	1	MTUWTHF	200	T L

C E 366 BEHAVIOR OF REINFORCED CONCRETE MEMBERS.
PREREQUISITE--UNDERGRADUATES-SENIOR STANDING AND C.E. 264. GRAD STUDENTS-B.S.DEGREE IN C.E. OR ARCHITECTURE WITH COURSES IN STRUCTURES AND REINFORCED CONCRETE DESIGN.
4 HOURS. OR 1 UNIT

LECT-DISC		1-3	M W F	320	C E H

C E 380 FOUNDATION ENGINEERING.
PREREQUISITE--C E 210. SENIOR STANDING.
3 HOURS. OR 1 UNIT

LECT-DISC	E	8	MTUWTHFS	320	C E H

C E 383 SOIL MECHANICS.
UNDERGRADUATE PREREQUISITE--C.E. 210. SENIOR STANDING OR CONSENT OF INSTRUCTOR. GRADUATE PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 OR 1 UNIT

LECT-DISC	E	11	MTUWTHFS	200	T L

C E 391 NUMERICAL AND COMPUTER APPLICATIONS IN CIVIL ENGINEERING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN CIVIL OR ARCH. ENG. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	E	9	MTUWTHFS	322	C E H

COURSES FOR GRADUATES

C E 460 STRUCTURAL ANALYSIS.
PREREQUISITE--B.S. DEGREE IN ENGINEERING AND UNDERGRADUATE COURSE IN THEORY OF SIMPLE STRUCTURES.
1 UNIT

LECT-DISC	E	10	MTUWTHF	322	C E H	GAYLORD

C E 461 STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--B.S. IN C.E., AND C.E. 361. OR C.E. 460. OR EQUIVALENT
1 UNIT

LECT-DISC	E	11	MTUWTHF	320	C E H	HALL

C E 465 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--B.S. IN ENGINEERING WITH COURSES IN STRUCTURES.
1 UNIT
LECT-DISC E 1 MTUWTHF 305 C E H GAYLORD

C E 468 ANALYSIS AND DESIGN OF PRESTRESSED CONCRETE STRUCTURES.
PREREQUISITE--B.S. IN CIVIL OR ARCHITECTURAL ENGINEERING WITH COURSES IN REINFORCED CONCRETE AND IN ANALYSIS OF INDETERMINATE STRUCTURES.
1 UNIT
LECT-DISC E 10 MTUWTHF 320 C E H KHACHATURIAN

C E 471 NUMERICAL AND APPROXIMATE METHODS OF STRUCTURAL ANALYSIS.
1 OR 2 UNITS
LECT-DISC E 9 MTUWTHF 320 C E H

C E 475 BEHAVIOR OF STEEL STRUCTURES.
PREREQUISITE--GRADUATE STANDING IN C.E. OR T.A.M.
1 UNIT
LECT-DISC E 8 MTUWTHF 200 T L MUNSE

C E 484 FOUNDATION ENGINEERING.
PREREQUISITE--CREDIT OR REGISTRATION IN C.E. 384 OR CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 2 MTUWTHF 305 C E H PECK

C E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS
CONF 0 ARR STAFF

C E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION-M-IS FOR MASTERS DEGREE, SECTION-D-IS FOR PH.D. DEGREE.
CONF *M ARR STAFF
CONF *D ARR STAFF

COMMUNICATIONS

DEPARTMENT OFFICE 1203 W ILLINOIS, U

THE GRADUATE PROGRAM LEADING TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATIONS IS ADMINISTERED BY AN INTERDISCIPLINARY COMMITTEE APPOINTED BY THE DEAN OF THE GRADUATE COLLEGE. STUDENTS SEEKING ADMISSION TO THIS PROGRAM SHOULD CONSULT DALLAS SMYTHE, CHAIRMAN OF THE COMMITTEE.

OF THE COURSES OFFERED THIS SEMESTER, COMM. 490 AND 499 ARE IN THE GENERAL CATEGORY, COMM. 473 AND 481 ARE IN GROUP A.
COMM. 300 IS IN GROUP B.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

COMM 300 INTRODUCTION TO LINGUISTICS.
SAME AS LING. 300.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED
LECT-DISC 11 MTUWTHF 108 L H
10 TH 108 L H

COURSES FOR GRADUATES

COMM 473 HISTORY AND THEORY OF FREEDOM OF THE PRESS.
SAME AS JOURN. 473.
1 UNIT
LECT-DISC 10-12 TU TH 123 G H JENSEN

COMM 481 ADVANCED ADVERTISING PRINCIPLES.
SAME AS ADV. AND MKTG. 481.
*GRADUATE STUDENTS MAY NOT RECEIVE CREDIT FOR BOTH ADV. 388 AND COMM. 481.
*1 UNIT
LECT-DISC 10-12 M W 123 G H MOYER

COMM 490 SPECIAL TOPICS IN COMMUNICATIONS.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS.
1/2 TO 2 UNITS
CONF ARR STAFF

COMM 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS AND THESIS SUPERVISOR.
*STUDENTS MAY ACCUMULATE A TOTAL OF 8 UNITS.
*0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

DAIRY SCIENCE

DEPARTMENT OFFICE 315 A S L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

D S 300 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING, APPROVAL OF HEAD OF DEPARTMENT.
3 TO 5 HOURS, OR 1/2 TO 1 UNIT
CONF ARR SALISBURY AND STAFF

COURSES FOR GRADUATES

D S 493 SPECIAL PROBLEMS.
1/2 TO 2 UNITS
CONF ARR SALISBURY AND STAFF

D S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR SALISBURY AND STAFF

DAIRY TECHNOLOGY

SEE FOOD TECHNOLOGY

DIVISION OF GENERAL STUDIES L A S

DEPARTMENT OFFICE 221 A H

COURSES FOR UNDERGRADUATES

D G S 131 BIOLOGICAL SCIENCE, I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		11	MTUWTH	247	N H B		UECKER
LAB-DISC	1	1-3	MTUWTH	432	N H B		BRUST
LAB-DISC	2	2-4	MTUWTH	432	N H B		

D G S 142 PHYSICAL SCIENCE, II.
PREREQUISITE--D.G.S. 141 OR CONSENT OF INSTRUCTOR.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
*SECTION S IS RESERVED FOR SUPERIOR STUDENTS.

LECT		1	MTUWTHF	141	A H		HOUSE
DISC	B	9	MTUWTHF	141	A H		HOUSE

ECONOMICS

DEPARTMENT OFFICE 226 D K H

SEE ALSO ACCOUNTANCY, AGRICULTURAL ECONOMICS, BUSINESS EDUCATION, BUSINESS LAW, FINANCE, MANAGEMENT, AND MARKETING

MAJOR--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108 OR 102 AND 103, AND ECON. 300 AND 301. LIBERAL ARTS MAJORS IN ECONOMICS ARE STRONGLY ADVISED TO ELECT ECON. 171 AND ACCY. 201. ECON. 171 IS ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR, BUT ACCY. 201 IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, EDUCATION, FINANCE, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY. AN ECONOMICS MAJOR WHO CHOOSES FINANCE AS A MINOR MUST INCLUDE TWELVE HOURS IN A SECOND MINOR. THE CURRICULUM IN LATIN-AMERICAN OR RUSSIAN AREA STUDIES IS ACCEPTED AS A MINOR.

NOTE--ECON. 102 AND 103 ARE REQUIRED FOR ALL COMMERCE STUDENTS, AND THESE OR 108 ARE REQUIRED FOR ALL LIBERAL ARTS MAJORS IN ECONOMICS. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN ECONOMICS SHOULD TAKE THESE COURSES IN THEIR SOPHOMORE YEAR.

COURSES FOR UNDERGRADUATES

ECON 102 PRINCIPLES OF ECONOMICS, I.
PREREQUISITE--SOPHOMORE STANDING OR SECOND SEMESTER FRESHMAN HONOR STUDENT OR JAMES SCHOLAR.
3 HOURS

LECT-DISC	B	9	MTUWTHF	222	D K H		LARSON
	B	3	TH	222	D K H		

ECON 103 PRINCIPLES OF ECONOMICS, II.
PREREQUISITE--ECON. 102.
3 HOURS

LECT-DISC	A	8	MTUWTHF	222	D K H		RESEK
	A	3	W	222	D K H		

ECON 108 ELEMENTS OF ECONOMICS.
NOT OPEN TO COMMERCE STUDENTS OR STUDENTS WHO HAVE HAD ECON. 102 AND 103.
PREREQUISITE--SECOND SEMESTER FRESHMAN.
3 HOURS

LECT-DISC	A	8	MTUWTHF	125	D K H	STEINKAMP
	A	3	W	125	D K H	
LECT-DISC	B	9	MTUWTHF	125	D K H	PADEN
	B	3	M	125	D K H	

ECON 170 ELEMENTS OF STATISTICS.
PREREQUISITE--ECON. 102 OR 108. SOPHOMORE STANDING.
*NOT OPEN FOR CREDIT IN ADDITION TO ECON. 171. MATH. 161. OR PSYCH. 135.
*3 HOURS

LECT-DISC	D	11	MTUWTHF	222	D K H	STEINKAMP
	D	3	M	222	D K H	

COURSES FOR ADVANCED UNDERGRADUATES

ECON 210 COMPARATIVE ECONOMIC SYSTEMS.
PREREQUISITE--ECON. 102 AND 103. OR 108.
3 HOURS

LECT-DISC	A	8	MTUWTHF	119	D K H	MCCONNELL
	A	3	TH	119	D K H	

ECON 214 GOVERNMENT FINANCE AND TAXATION.
PREREQUISITE--ECON. 102 AND 103. OR 108.
3 HOURS

LECT-DISC	B	9	MTUWTHF	119	D K H	MCCONNELL
	B	3	W	119	D K H	

ECON 218 CURRENT ECONOMIC PROBLEMS--NATIONAL AND INTERNATIONAL.
FOR NON-COMMERCE STUDENTS ONLY.
PREREQUISITE--ECON. 102 AND 103. OR 108.
3 HOURS

LECT-DISC	C	10	MTUWTHF	222	D K H	BRANDIS
	C	3	TU	222	D K H	

ECON 290 HONORS COURSE.
PREREQUISITE--A MAJOR IN ECONOMICS. AT LEAST FIFTEEN HOURS OF ADVANCED COURSES.
2 TO 4 HOURS

CONF	ARR		BELL

ECON 292 INDEPENDENT STUDY.
PREREQUISITE--CONSENT OF CHAIRMAN OF DEPARTMENT.
*TEN SEMESTER HOURS IN THIS DEPARTMENT OR SIXTEEN SEMESTER HOURS DIVIDED BETWEEN THIS AND ANY OTHER DEPARTMENT MAY BE ACCUMULATED
*3 TO 5 HOURS

CONF	ARR		BELL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ECON 300 INTERMEDIATE ECONOMIC THEORY AND ANALYSIS.
PREREQUISITE--ECON. 103. OR 109. OR A GRADE OF B OR BETTER IN ECON. 108.
3 HOURS. OR 1/2 UNIT

LECT-DISC	C	10	MTUWTHF	111	D K H	BRANDIS
	C	3	TU	111	D K H	

ECON 336 AMERICAN ECONOMIC HISTORY.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	D	11	MTUWTHF	111	D K H	KEMMERER
	D	3	M	111	D K H	

ECON 372 OPERATIONS RESEARCH.
PREREQUISITE--ECON. 170 AND MGMT. 101. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	D	11	MTUWTHF	119	D K H	SHUPP
	D	3	M	119	D K H	

COURSES FOR GRADUATES

ECON 400 GENERAL ECONOMIC THEORY.
PREREQUISITE--ECON. 102 AND 103. OR 108.
1 UNIT

LECT-DISC	8-10	TU F	111	D K H		SHUPP

ECON 407 A HISTORY OF ECONOMIC THOUGHT. II.
1 UNIT

LECT-DISC	10-12	TU TH	125	D K H		BELL

ECON 437 RESEARCH IN AMERICAN ECONOMIC HISTORY.
PREREQUISITE--ECON. 336 OR 436 OR EQUIVALENT. A COURSE IN ECONOMIC PRINCIPLES OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	8-10	M TH	111	D K H		KEMMERER

ECON 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 OR 1 UNIT

CONF	ARR					BELL

ECON 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

LECT-DISC	8-10	W	111	D K H		BELL

EDUCATION

DEPARTMENT OFFICE 105 G H

COURSES FOR ADVANCED UNDERGRADUATES

ED 201 FOUNDATIONS OF AMERICAN EDUCATION.
PREREQUISITE--ED. 101. PSYCH. 100.
2 HOURS

LECT-DISC	B	9	TUWTHF	304	L H	
LECT-DISC	C	10	TUWTHF	215	G H	
LECT-DISC	D	11	TUWTHF	321	G H	

ED 211 EDUCATIONAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100.
3 HOURS

LECT-DISC		8	TUWTHF	148	L H	TWARANOVICA
LAB		1-3	TU	148	L H	TWARANOVICA

ED 219 REMEDIAL READING IN THE HIGH SCHOOL.
PREREQUISITE--ED. 211.
3 HOURS

LECT-DISC		9	TUWTHF	305	G H	WALKER

ED 230 PRINCIPLES OF ELEMENTARY EDUCATION.
PREREQUISITE--PSYCH. 100. ED. 101.
2 HOURS

LECT-DISC		9	TUWTHF	232	L H	WALDEN

ED 233 CLASSROOM PROGRAMS IN CHILDHOOD EDUCATION.
PREREQUISITE--JUNIOR STANDING.
2 HOURS

LECT-DISC		10	TUWTHF	221	G H	BISHOP

ED 235 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
PREREQUISITE--ED. 101. JUNIOR STANDING.
3 HOURS.

LECT-DISC		11	TUWTHF	219	G H	WALDEN
LAB		ARR				

ED 236 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--PSYCH. 100. ED. 101.
3 HOURS

LECT	8	TUWTHF	100	G	H	
LAB	1-3	TU TH	3	G	H	

ED 237 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--ED. 236.
3 HOURS

LECT	11	TUWTHF	9	G	H	
LAB	1-3	TU TH	307	G	H	

ED 240 PRINCIPLES OF SECONDARY EDUCATION.
PREREQUISITE--ED. 101. PSYCH. 100.
2 HOURS

LECT-DISC	8	TUWTHF	232	L	H	PALMER

ED 249 INDEPENDENT STUDY
PREREQUISITE--UPPER CLASSMEN. UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE.
2 HOURS

CONF	ARR					STAFF

ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF	ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ED 301 PHILOSOPHY OF EDUCATION.
2 HOURS. OR 1/2 UNIT

LECT-DISC	9	TUWTHF	213	G	H	MCMURRAY

ED 302 HISTORY OF AMERICAN EDUCATION.
2 HOURS. OR 1/2 UNIT

LECT-DISC	10	TUWTHF	311	G	H	KLASSEN

ED 303 COMPARATIVE EDUCATION.
2 HOURS. OR 1/2 UNIT

LECT-DISC	11	TUWTHF	223	G	H	KAULFERS

ED 304 SOCIAL FOUNDATIONS OF EDUCATION.
2 HOURS. OR 1/2 UNIT
*MEETS FIRST 4 WEEKS ONLY

LECT-DISC A	8	TUWTHF	317	G	H	WILEY
LECT-DISC B1	9	TUWTHF	321	G	H	WILEY
LECT-DISC B2	9	TUWTHF	317	G	H	J R BURNETT
LECT-DISC *C1	10-12	TUWTHF	213	G	H	STANLEY
LECT-DISC C2	10	TUWTHF	319	G	H	SMITH
LECT-DISC D	11	TUWTHF	319	G	H	SMITH

ED 305 HISTORY OF EDUCATIONAL IDEAS.
2 HOURS. OR 1/2 UNIT

LECT-DISC A1	8	TUWTHF	207	G	H	MCMURRAY
LECT-DISC A2	8	TUWTHF	311	G	H	ECKELBERRY
LECT-DISC B1	9	TUWTHF	207	G	H	BROUDY
LECT-DISC B2	9	TUWTHF	217	G	H	ECKELBERRY
LECT-DISC C	10	TUWTHF	217	G	H	KAULFERS
LECT-DISC D	11	TUWTHF	3	G	H	J R BURNETT

ED 311 PSYCHOLOGY OF LEARNING FOR TEACHERS.
PREREQUISITE--ED. 211. PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS. OR 1/2 UNIT

LECT-DISC A	8	TUWTHF	213	G	H	GLIESSMAN
LECT-DISC B1	9	TUWTHF	319	G	H	KNAPP
LECT-DISC B2	9	TUWTHF	331	G	H	HALLWORTH
LECT-DISC C1	10	TUWTHF	331	G	H	GAIER
LECT-DISC C2	10	TUWTHF	223	G	H	BLAIR
LECT-DISC D1	11	TUWTHF	217	G	H	
LECT-DISC D2	11	TUWTHF	207	G	H	KNAPP

```
ED    312     MENTAL HYGIENE AND THE SCHOOL.
        PREREQUISITE--ED. 211. PRACTICE TEACHING OR TEACHING EXPERIENCE.
        2 HOURS. OR 1/2 UNIT
        *MEETS FIRST 4 WEEKS ONLY
              LECT-DISC *A1      8-10        TUWTHF   215  G H            PATTERSON
              LECT-DISC  A2      8           TUWTHF   321  G H            GAIER
              LECT-DISC  B1      9           TUWTHF   223  G H            GRONLUND
              LECT-DISC  B2      9           TUWTHF   311  G H            GLIESSMAN
              LECT-DISC  C1     10           TUWTHF   207  G H
              LECT-DISC  C2     10           TUWTHF     3  G H
              LECT-DISC  D1     11           TUWTHF   331  G H            HALLWORTH
              LECT-DISC  D2     11           TUWTHF   215  G H


ED    316     THE GIFTED CHILD IN SCHOOL AND SOCIETY.
        PREREQUISITE--ED. 211 OR 236.
        3 HOURS. OR 1/2 OR 1 UNIT
        MEETS FIRST FOUR WEEKS.
              LECT-DISC          8             W  F   105  L H            NEWLAND
                                 8-10        TU TH    105  L H            NEWLAND


ED    318     WORKSHOP AND LABORATORY IN EDUCATION OF EXCEPTIONAL CHILDREN.
        PREREQUISITE--ED. 322.
        4 TO 8 HOURS. OR 1 TO 2 UNITS
        *SECTION A IS FOR EDUCABLE MENTALLY HANDICAPPED AND WILL BE OFFERED
        FOR 8 WEEKS.  ADDITIONAL HOURS TO BE ARRANGED.
              LECT-DISC *A       9-3         TUWTHF  1003 W NEVADA

ED    322     PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED. I.
        PREREQUISITE--ED. 231. SENIOR STANDING.
        3 HOURS. OR 1/2 UNIT
                MEETS FIRST FOUR WEEKS.
              LECT-DISC          8-10        TUWTHF  1001 W NEVADA         R HENDERSON

ED    323     PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED. II.
        PREREQUISITE--ED. 322.
        3 HOURS. OR 1/2 UNIT
                MEETS SECOND FOUR WEEKS
              LECT-DISC          8-10        TUWTHF  1001 W NEVADA         JORDAN

ED    324     MENTAL AND EDUCATIONAL MEASUREMENT OF EXCEPTIONAL CHILDREN.
        PREREQUISITE--ED. 117 OR CONSENT OF INSTRUCTOR.
        3 HOURS. OR 1/2 OR 1 UNIT
              LECT-DISC          3-5         TUWTHF  1001 W NEVADA         COTTRELL

ED    335     SCIENCE IN THE ELEMENTARY SCHOOL.
        PREREQUISITE--ED. 101 AND 201. OR EQUIVALENT COURSES. TWO YEARS OF
        COLLEGE SCIENCE.
        3 HOURS. OR 1/2 UNIT
                *LECTURE REQUIRES FOUR ADDITIONAL LAB HOURS TO BE ARRANGED.
              LECT-DISC         *10          TUWTHF     2  E E C          R W BURNETT
              LAB              ARR

ED    336     PRIMARY READING.
        PREREQUISITE--ED. 101. 201. AND 230.
        3 HOURS. OR 1/2 UNIT
                *SECTION A MEETS FIRST 4 WEEKS.
              LECT-DISC *A       8-10        TUWTHF   307  G H            MOORE
              LECT-DISC  C      10           TUWTHF     4  G H            SHORES

ED    337     ART EDUCATION IN THE ELEMENTARY SCHOOL.
        PREREQUISITE--ED. 101. 201. AND 230.
        3 HOURS. OR 1/2 UNIT
              LECT-DISC  A       8           TUWTHF   106  F A B          BREEN
              LECT-DISC  C      10           TUWTHF   106  F A B          BREEN

ED    343     INDIVIDUAL INTELLIGENCE TESTING.
        PREREQUISITE--SIX HOURS OF PSYCHOLOGY AND EITHER ED. 324. OR ED.
        392. OR PSYCH. 290. OR EQUIVALENT.
        2 HOURS. OR 1 UNIT
              LECT               1-3         TUWTHF   134  E P G B        NEWLAND
              LAB              ARR
```

ED 360 EDUCATIONAL USES OF TELEVISION AND RADIO.
SAME AS R.TV. 360.
3 HOURS. OR 1/2 UNIT
*TWO ADDITIONAL HOURS TO BE ARRANGED. MEETS FIRST FOUR WEEKS.

LECT-DISC	10-12	TUWTHF	205	E B	MCINTYRE

ED 384 THE GENERAL SHOP PROGRAM.
SAME AS I. ED. 384.
PREREQUISITE--SIXTEEN HOURS IN INDUSTRIAL EDUCATION.
4 HOURS. OR 1 UNIT

LECT-DISC	8	MTUWTHFS	102	WOODSHOP	HOUSEHOLDER
	9-12	TUWTHF	105	WOODSHOP	

ED 390 ELEMENTS OF EDUCATIONAL STATISTICS.
3 HOURS. OR 1 UNIT

LECT-DISC	9-11	TUWTHF	205	G H	KAPPAUF

ED 391 CONSTRUCTION AND USE OF TESTS IN TEACHING.
PREREQUISITE--ED. 211.
2 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	11	TUWTHF	304	G H	GRONLUND

ED 392 INTRODUCTION TO THE PRINCIPLES OF MEASUREMENT.
PREREQUISITE--ED. 211.
2 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	A	8	TUWTHF	3	G H	HASTINGS
LECT-DISC	B	9	TUWTHF	43	G H	J PHILLIPS
LECT-DISC	C	10	TUWTHF	43	G H	CRONBACH

COURSES FOR GRADUATES

ED 402 EDUCATIONAL MOVEMENTS IN THE TWENTIETH CENTURY.
PREREQUISITE--ED. 300. OR 302. OR 403. OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	11	TUWTHF	325	G H	KLASSEN

ED 410 SEMINAR IN THEORIES OF EDUCATIONAL AND SOCIAL CHANGE.
ONLY OPEN TO CANDIDATES FOR THE ED. D. OR PH. D. IN EDUCATION.
1 UNIT

LECT-DISC	1-3	TU TH	304	G H	BROUDY. STAN

ED 411 PSYCHOLOGY OF ADOLESCENCE FOR TEACHERS.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	10	TUWTHF	321	G H	AUSUBEL

ED 412 ADVANCED CHILD DEVELOPMENT FOR STUDENTS OF EDUCATION.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	8	TUWTHF	219	G H	COSTIN

ED 413 SOCIAL PSYCHOLOGY AND THE PROBLEMS OF EDUCATION.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	8	TUWTHF	329	G H	R SIMPSON

ED 414 THE PSYCHOLOGY OF COLLEGE TEACHING.
PREREQUISITE--A COURSE IN PSYCHOLOGY. CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	11	TUWTHF	307	G H	R SIMPSON

ED 415 PSYCHOLOGICAL THEORIES APPLIED TO EDUCATION.
PREREQUISITE--ED. 311 AND 312. ED. 411 OR 412. CANDIDACY FOR ED.D OR PH.D IN EDUCATION.
1 UNIT

LECT-DISC	1-3	TU TH	305	G H	BLAIR

ED 417 PSYCHO-EDUCATIONAL PROBLEMS OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SIXTEEN HOURS OF PSYCHOLOGY AND/OR EDUCATION, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		1-3	TU TH	1001 W NEVADA	QUIGLEY

ED 421 ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION.
PREREQUISITE--ED. 417, 460, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		1-3	W F	1001 W NEVADA	R HENDERSON

ED 422 BASIC PRINCIPLES OF COUNSELING.
PREREQUISITE--ED. 311 AND 312.
1 UNIT

LECT-DISC	A	8	TUWTHF	205 G H	
LECT-DISC	B	9	TUWTHF	219 G H	SLATER
LECT-DISC	C	10	TUWTHF	329 G H	PROFF
LECT-DISC	D	11	TUWTHF	111 G H	KACZKOWSKI

ED 423 THE USE OF TESTS IN GUIDANCE.
PREREQUISITE--ED. 392.
1 UNIT

LECT-DISC	A	8	TUWTHF	43 G H	
LECT-DISC	B	9	TUWTHF	4 G H	J PHILLIPS

ED 424 SUPERVISED PRACTICE IN COUNSELING.
PREREQUISITE--MASTERS DEGREE IN GUIDANCE AND CONSENT OF FACULTY COMMITTEE.
2 UNITS

PRACT	A	ARR		116 E P G B	SHOEMAKER
PRACT	B	ARR		116 E P G B	BONNEY

ED 425 PRINCIPLES OF GUIDANCE.
*CREDIT IS NOT GIVEN IN BOTH ED. 325 AND ED. 425.
*1 UNIT

LECT-DISC	A	8	TUWTHF	319 G H	PROFF
LECT-DISC	B	9	TUWTHF	327 G H	KACZKOWSKI
LECT-DISC	C	10	TUWTHF	305 G H	

ED 426 DIAGNOSTIC AND REMEDIAL PROGRAMS OF THE SCHOOL.
1 UNIT

LECT-DISC	B	9	TUWTHF	308 E E C	W EVANS
LECT-DISC	C	10	TUWTHF	308 E E C	CULLITON

ED 427 PRINCIPLES AND TECHNIQUES OF GROUP GUIDANCE.
PREREQUISITE--ED. 311, 312, 422, 423, AND EITHER 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	8-10	TUWTHF	116 E P G B	
LECT-DISC	B	10-12	TUWTHF	116 E P G B	

ED 428 THE ANALYSIS AND USE OF OCCUPATIONAL INFORMATION IN GUIDANCE PROGRAMS.
PREREQUISITE--ED. 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		11	TUWTHF	311 G H	

ED 429 FIELD INSTRUCTION IN COUNSELING.
PREREQUISITE--ED. 422, CREDIT OR REGISTRATION IN ED. 424, CONSENT OF INSTRUCTOR.
1 OR 2 UNITS

CONF		ARR			PATTERSON

ED 430 ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION.
PREREQUISITE--ED. 431 AND 439.
1 UNIT

LECT-DISC		9	TUWTHF	329 G H	BARNES

ED 431 ELEMENTARY SCHOOL CLASSROOM PROGRAMS.
1 UNIT

LECT-DISC	A	8	TUWTHF	111 G H	JOHNSON
LECT-DISC	B	9	TUWTHF	221 G H	
LECT-DISC	C	10	TUWTHF	219 G H	SPAULDING
LECT-DISC	D	11	TUWTHF	4 G H	STENDLER

ED 433 CURRICULUM PROBLEMS AND TRENDS IN SPECIAL FIELDS OF ELEMENTARY EDUCATION.
PREREQUISITE--ED. 431. FOR THE SECTION IN READING AND THE LANGUAGE ARTS--ED. 336 OR A COURSE IN THE TEACHING OF READING OR LANGUAGE ARTS. OR CONSENT OF INSTRUCTOR. FOR THE SECTION IN ELEMENTARY SCIENCE--ED. 335 AND TWO YEARS OF COLLEGE SCIENCE OR CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION A3 IS FOR SCIENCE
*SECTION B IS FOR ARITHMETIC.
*SECTIONS A2 AND C ARE FOR SOCIAL STUDIES.
*SECTIONS A1 AND D ARE FOR LANGUAGE ARTS.
*SECTION E IS FOR CREATIVE ART.

LECT-DISC	*A1	8	TUWTHF	325	G	H	CULLITON
LECT-DISC	*A2	8	TUWTHF	217	G	H	CHALTAS
LECT-DISC	*A3	8	TUWTHF	113	G	H	R W BURNETT
LECT-DISC	*B	9	TUWTHF	325	G	H	JOHNSON
LECT-DISC	*C	10	TUWTHF	307	G	H	MCGILL
LECT-DISC	*D	11	TUWTHF	113	G	H	W EVANS
LECT-DISC	*E	11	TUWTHF	133	F	A B	LANSING

ED 434 PROGRAMS IN EARLY CHILDHOOD EDUCATION.
PREREQUISITE--ED. 431.
1 UNIT

LECT-DISC	11	TUWTHF	43	G	H	

ED 437 METHODS OF CHILD STUDY.
PREREQUISITE--ED. 312 OR CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION B WILL GIVE SPECIAL EMPHASIS TO METHODS AND TECHNIQUES OF CHILD STUDY DEVELOPED AND EMPLOYED BY PIAGET.

LECT-DISC	A	8	TUWTHF	221	G	H	SPAULDING
LECT-DISC	*B	9	TUWTHF	123	G	H	STENDLER

ED 438 SUPERVISION OF THE ELEMENTARY SCHOOL.
PREREQUISITE--ED. 431 AND 439.
1 UNIT

LECT-DISC		8	TUWTHF	331	G	H	MCGILL

ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT

LECT-DISC	A1	8	TUWTHF	327	G	H	WALKER
LECT-DISC	A2	8	TUWTHF	223	G	H	SHORES
LECT-DISC	B	9	TUWTHF	336	G	H	DEBOER
LECT-DISC	C	10	TUWTHF	317	G	H	HAND

ED 440 ADMINISTRATION AND SUPERVISION OF JUNIOR AND SENIOR HIGH SCHOOLS.
PREREQUISITE--ED. 460 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	8	TUWTHF	305	G	H	MCCLEARY
LECT-DISC	D	11	TUWTHF	317	G	H	HAND

ED 441 LINGUISTIC AND LOGICAL ANALYSIS OF TEACHING.
1 UNIT

LECT-DISC		10	TUWTHF	336	G	H	K HENDERSON

ED 448 CONTINUING EDUCATION.
1/2 OR 1 UNIT
MEETS FIRST FOUR WEEKS.

LECT-DISC		8-10	TUWTHF	304	G	H	PHIPPS

ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

CONF	ARR		GRADUATE STAF

ED 450 EVALUATION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS.

LECT-DISC		8-11	TUWTHF	9	G	H	MATHER

ED 455 THEORIES OF ART EDUCATION.
PREREQUISITE--ED. 337 OR 456. OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		9	TUWTHF	133	F	A B	LANSING

ED 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.

1 UNIT
*SECTION A IS FOR MATHEMATICS.
*SECTION B IS FOR SOCIAL STUDIES.
*SECTION C IS FOR ENGLISH.
*SECTION E IS FOR HOME ECONOMICS AND MEETS FIRST FOUR WEEKS.

LECT-DISC	*A	8	TUWTHF	336	G H	K HENDERSON
LECT-DISC	*B	9	TUWTHF	3	G H	METCALF
LECT-DISC	*C	10	TUWTHF	304	G H	DEBOER
LECT-DISC	*E	8-11	TUWTHF	9	G H	E SIMPSON

ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.

OFFICE AUTOMATION

1 UNIT LECT-DISC *A 10-12 TUWTHF 8 D K H MELSON

ADDITIONAL LAB HOURS ARRANGED.
*SECTION A IS FOR OFFICE AUTOMATION AND MEETS THE FIRST FOUR WEEKS. WILL STUDY THE BASIC CONCEPTS OF OFFICE AUTOMATION, IDENTIFY ITS NATURE, FUNCTIONS, PROBLEMS, AND TRENDS. CONSIDER ITS RELATIONSHIP TO OTHER SUBJECT MATTER IN THE FIELD OF OFFICE PROCEDURES, AND INVESTIGATE POINTS OF VIEW IN CURRICULUM DEVELOPMENT, INCLUDING GRADE LEVEL AND CONTENT OF INSTRUCTION. KEY PUNCH AND PUNCH TAPE EQUIPMENT WILL BE AVAILABLE FOR STUDY AND PRACTICE. ENROLLMENT LIMITED. CONSENT OF INSTRUCTOR REQUIRED.

FAMILY FINANCE

1 UNIT LECT-DISC *B ARR CRANK

*SECTION B IS FOR FAMILY FINANCE AND MEETS FIRST FOUR WEEKS. DEVELOPMENT OF FAMILY FINANCE INSTRUCTIONAL MATERIALS IN THE AREA OF SPECIAL INTEREST. REGISTRATION RESTRICTED TO THOSE WHO HAVE BEEN PRE-ENROLLED.

READING

1 UNIT LECT-DISC	*C	9-1130	TUWTHF	115	E E C	MOORE
	C	130-3	TUWTHF	115	E E C	

*SECTION C IS FOR READING AND MEETS SECOND FOUR WEEKS. DESIGNED TO GIVE DIRECT HELP ON THE PROBLEMS WHICH LOCAL SCHOOLS FACE IN ORGANIZING READING PROGRAMS AND IN TEACHING READING. WILL SERVE TO BRING TEACHERS AND ADMINISTRATORS UP TO DATE ON RECENT TRENDS AND DEVELOPMENTS IN METHODS AND MATERIALS, RESEARCH AND CURRENT EXPERIMENTATION IN TEACHING READING.

ARITHMETIC

1 UNIT LECT-DISC	*D	9-1130	TUWTHF	115	E E C	C PHILLIPS
	D	130-330	TUWTHF	115	E E C	

*SECTION D IS FOR ARITHMETIC AND MEETS FIRST FOUR WEEKS. IMPROVEMENT OF THE TEACHING OF ARITHMETIC BY OFFERING TWO KINDS OF HELP--BASIC UNDERSTANDING OF OUR NUMBER SYSTEM AND MODERN METHODS OF TEACHING ARITHMETIC.

DRAFTING AND ENGINEERING GRAPHICS

1 UNIT LECT-DISC	*E	8-11	TUWTHF	302	T B	HALL
	E	1-4	TUWTHF	302	T B	

*SECTION E IS FOR DRAFTING AND ENGINEERING GRAPHICS AND MEETS SECOND FOUR WEEKS. A THEORY AND LABORATORY COURSE INTENDED TO SERVE THE INDUSTRIAL EDUCATION TEACHER INTERESTED IN DEVELOPING AN UNDERSTANDING OF CURRENT DEVELOPMENTS IN DRAFTING AND ENGINEERING GRAPHICS AND SKILL IN USING CURRENT PRACTICES TO IMPROVE HIS INDUSTRIAL EDUCATION INSTRUCTION.

DESIGN

1 UNIT LECT-DISC	*F	1-3	MTUWTHF	102	WOODSHOP	SCHILL
	F	3-5	MTUWTHF	102	WOODSHOP	SCHILL

*SECTION F IS FOR IND EDUC MAJORS AND MEETS FIRST FOUR WEEKS. A THEORY AND LABORATORY WORKSHOP CENTERING ON THE APPLICATION OF THE PHYSICAL SCIENCES AND SOCIO-ECONOMIC PRINCIPLES TO THE VARIOUS PROGRAMS OF INSTRUCTION IN INDUSTRIAL EDUCATION.

SUPERVISION OF STUDENT TEACHING

1 UNIT LECT-DISC	*G	9-1130	TUWTHF	ARR	CHALTAS
	G	130-3	TUWTHF	ARR	

*SECTION G IS FOR ELEMENTARY SCHOOL COOPERATING TEACHERS AND MEETS SECOND FOUR WEEKS. THIS WORKSHOP IS ESPECIALLY DESIGNED FOR CLASSROOM TEACHERS WHO WORK OR ARE PLANNING TO WORK WITH STUDENT TEACHERS. IT WILL FOCUS ON IMPROVED SUPERVISORY PRACTICES AND ENRICHED CLASSROOM PROGRAMS THROUGH ATTENTION TO NEWER DEVELOPMENTS IN CURRICULUM, METHODOLOGY AND MATERIALS AS A WAY OF IMPROVING THE STUDENT TEACHING EXPERIENCE.

ED 459 CONTINUED

CONTINUING EDUCATION, COOPERATIVE AND EXTENSION SERVICE
1/2 UNIT LECT-DISC *H 8-10 TUWTHF 127 M H E W ANDERSON
*SECTION H MEETS FIRST FOUR WEEKS. A STUDY OF COOPERATIVE EXTENSION EDUCATION, ITS METHODS, PHILOSOPHIES AND EDUCATIONAL CHARACTERISTICS AS DISTINGUISHED FROM FORMAL EDUCATION. THE MAJOR EMPHASIS IS UPON UNDERSTANDING THE TEACHING-LEARNING PROCESS AS IT APPLIES TO ADULT LEARNING. THE PSYCHOLOGICAL PRINICIPLES OF ADULT MOTIVATION AND GROUP DYNAMICS ARE DEVELOPED AND EMPHASIZED.

HOME MANAGEMENT
1 UNIT LECT-DISC *I 8-11 TUWTHF 18 G H E SIMPSON, GUTHRIE
*SECTION I IS FOR HOME ECONOMICS EDUCATION MAJORS AND MEETS THE SECOND FOUR WEEKS. A MAJOR EMPHASIS IN TODAYS HOME ECONOMICS CURRICULUM, HOME MANAGEMENT, IS STUDIED IN RELATION TO ALL AREAS OF HOME ECONOMICS. RESEARCH IN THE AREA OF HOME MANAGEMENT AND METHODS OF TEACHING WILL BE EMPHASIZED THROUGH A TEAM-TEACHING APPROACH BY A SUBJECT-MATTER SPECIALIST AND AN EDUCATION SPECIALIST.

FOODS AND NUTRITION
1 UNIT LECT-DISC *J 8-11 TUWTHF 358 BEV HALL MATHER, JANS: MCKEY
*SECTION J IS FOR HOME ECONOMICS EDUCATION MAJORS AND MEETS THE FIRST FOUR WEEKS. DESIGNED FOR HIGH SCHOOL AND COLLEGE TEACHERS WHO HAVE RESPONSIBILITIES FOR TEACHING IN THE AREA OF FOOD AND NUTRITION. EMPHASIS IS GIVEN TO WAYS IN WHICH SOCIAL AND ECONOMIC CHANGES AFFECT FOODS TEACHING, RESULTS OF RECENT RESEARCH IN NUTRITION AND FOOD PREPARATION, METHODS OF PRESENTING SUBJECT MATTER, AND WAYS TO EVALUATE ONES TEACHING. BOTH SUBJECT MATTER SPECIALISTS IN FOOD AND NUTRITION AND A SPECIALIST IN EDUCATION WILL PARTICIPATE IN THIS WORKSHOP.

NATIONAL SCIENCE FOUNDATION MATHEMATICS PROGRAM
1 1/2 LECT-DISC *K 830-1130 MTUWTHF ARR STAFF
UNITS K 130-4 MTUWTHF ARR
*SECTION K IS RESTRICTED TO NATIONAL SCIENCE FOUNDATION STIPEND HOLDERS ONLY WHO HAVE BEEN PRE-ENROLLED FOR THE MATHEMATICS PROGRAM. MEETS JULY 1 THROUGH AUGUST 9.

ENGLISH IN UPPER ELEMENTARY AND JUNIOR HIGH SCHOOL GRADES
1 UNIT LECT-DISC *L 9-11 TUWTHF ARR LINDLEY
*SECTION L--THE DEVELOPMENT OF CONTENT AND TEACHING METHODS WILL BE PRESENTED IN A DEMONSTRATION CLASS AND ANALYZED. SIGNIFICANT CONCEPTS IN THE OPERATION OF LANGUAGE AND THE NATURE OF MEANING WILL BE STRESSED.

ED 460 PUBLIC CONTROL AND ADMINISTRATION OF EDUCATION.
NOT OPEN TO EXPERIENCED ADMINISTRATORS OR TO ANY STUDENTS WHO HAVE TAKEN ANY OF THE FOLLOWING COURSES--OR EQUIVALENTS--ED. 430, 440, 461, 462, 464, 465, 466.
1 UNIT
LECT-DISC B 9 TUWTHF 111 G H MILLER
LECT-DISC C 10 TUWTHF 111 G H CASTALDI

ED 461 ADMINISTRATION OF EDUCATIONAL PROGRAMS AND PERSONNEL.
PREREQUISITE--ED. 460, ED. 430 OR 440.
1 UNIT
LECT-DISC 11-3 W F 336 G H MCCLEARY, PALMER

ED 463 THE ROLE OF ADMINISTRATIVE LEADERSHIP.
PREREQUISITE--ED. 460, 430, OR 440, AND ED. 461.
1 UNIT
LECT-DISC 11-3 TU TH 336 G H MILLER, HENC

ED 466 PUBLIC SCHOOL FINANCE.
PREREQUISITE--ED. 460, 462 AND 430, OR 440.
1 UNIT
LECT-DISC 9 TUWTHF 46 G H MCLURE

ED 468 PUBLIC RELATIONS OF THE SCHOOLS.
1 UNIT
LECT-DISC 8 TUWTHF 4 G H CASTALDI

ED 469 LEGAL BASIS OF SCHOOL ADMINISTRATION.
1 UNIT
LECT-DISC 10 TUWTHF 325 G H SUMPTION

ED 472 COURSE PLANNING AND TEACHING PROCEDURES IN VOCATIONAL AGRICULTURE.
PREREQUISITE--AG. ED. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS
LECT-DISC 8-10 TUWTHF 18 G H WARMBROD

ED 473 VOCATIONAL EDUCATION IN AGRICULTURE FOR ADULTS.
PREREQUISITE--AG. ED. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS.
LECT-DISC 10-12 TUWTHF 18 G H HEMP

ED 474 SUPERVISED FARMING IN VOCATIONAL AGRICULTURE.
PREREQUISITE--AG. ED. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS
LECT-DISC 1-3 TUWTHF 111 G H WARMBROD

ED 475 ORGANIZING AND TEACHING FARM MECHANICS.
PREREQUISITE--AG. ED. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS
LECT-DISC 10-12 TUWTHF 327 G H PHIPPS

ED 488 CURRICULUM PROBLEMS AND TRENDS IN INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN INDUSTRIAL EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS
LECT-DISC 1-3 TUWTHF 325 G H

ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 OR 2 UNITS
*SECTION A IS FOR SECONDARY EDUCATION STUDENTS.
LECT-DISC *A 11 TUWTHF 329 G H METCALF
LECT-DISC B ARR GRADUATE STAFF

ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS
CONF ARR GRADUATE STAFF

ED 496 STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. 390.
1 UNIT
LECT-DISC 11 TUWTHF 221 G H PINGRY
LAB 1-3 TUW F 221 G H

ED 497 ADVANCED STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. 496.
1 UNIT
LECT-DISC 11 TUWTHF 305 G H
LAB 2-4 W 305 G H

ED 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER--0 TO 2 1/2 UNITS
*SECTION A IS FOR A. M. OR M. S. DEGREE CANDIDATES. SECTION B IS FOR PH. D. CANDIDATES. SECTION C IS FOR EDD CANDIDATES.
CONF *A ARR GRADUATE STAFF
CONF *B ARR GRADUATE STAFF
CONF *C ARR GRADUATE STAFF

DEPARTMENT OFFICE 158 E E B

COURSES FOR UNDERGRADUATES

E E 114 WIRING AND ILLUMINATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
*ENGINEERING STUDENTS RECEIVE NO CREDIT.
*3 HOURS

LECT-DISC	A	8-10	TU TH S	57	E E B

COURSES FOR ADVANCED UNDERGRADUATES

E E 220 BASIC ELECTRICAL ENGINEERING.
PREREQUISITE--PHYSICS 106 AND 107. AND MATH 143.
3 HOURS

QUIZ	A	9	MTUWTHF	161	E E B
	A	1	TU	161	E E B
QUIZ	B	8	MTUWTHF	161	E E B
	B	1	M	161	E E B

E E 230 APPLICATION AND CONTROL OF MOTORS AND EQUIPMENT.
PREREQUISITE--E E 220.
2 HOURS

QUIZ	A	8	MTUWTH	250	E E B

E E 231 POWER EQUIPMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E E 230.
1 HOUR

LAB	A	2-5	M W	50G	E E B

E E 234 ELECTRICAL INSTRUMENTS AND MEASUREMENTS.
PREREQUISITE--E E 220.
2 HOURS

QUIZ	A	10	MTUWTH	163	E E B

E E 235 ELECTRICAL MEASUREMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 234.
1 HOUR

LAB	A	2-5	TU TH	50J	E E B

E E 250 INTRODUCTION TO CIRCUIT ANALYSIS.
PREREQUISITE--PHYCS. 107. CREDIT OR REGISTRATION IN E. E. 251.
5 HOURS

QUIZ	A	8-10	MTUWTHF	163	E E B
QUIZ	B	10-12	MTUWTHF	161	E E B

E E 251 CIRCUIT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 250.
1 HOUR

LAB	A	2-5	M TH	146	E E B
LAB	B	2-5	TU F	146	E E B
LAB	C	2-5	W	146	E E B
	C	9-12	S	146	E E B

E E 271 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

CONF	A	ARR

E E 288 ECONOMIC ASPECTS OF ENGINEERING.
SAME AS G. E. 288.
PREREQUISITE--JUNIOR STANDING IN ENGINEERING. ECON. 108 OR CONSENT OF INSTRUCTOR.
3 HOURS

QUIZ	A	9	MTUWTHF	254	E E B
	A	1	TU	254	E E B
QUIZ	B	10	MTUWTHF	254	E E B
	B	1	W	254	E E B

E E 322 CIRCUIT ANALYSIS.
PREREQUISITE--E E 320 AND 321, MATH. 345, CREDIT OR REGISTRATION IN E E 323.
4 HOURS, OR 0 OR 1 UNIT

QUIZ	A	8-10	MTUWTHF	162	E E B

E E 323 CIRCUIT LABORATORY.
PREREQUISITE--E. E. 320 AND 321, CREDIT OR REGISTRATION IN E. E. 322 AND 350.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	146	E E B
LAB	B	2-5	TU TH	146	E E B

E E 330 MAGNETIC CIRCUITS AND TRANSFORMERS.
PREREQUISITE--E E 229, 320, 321, CREDIT OR REGISTRATION IN E E 331.
3 HOURS, OR 0 OR 3/4 UNIT

QUIZ	A	9	MTUWTHF	257	E E B
	A	1	TU	257	E E B
QUIZ	B	11	MTUWTHF	257	E E B
	B	1	TH	257	E E B

E E 331 MAGNETIC CIRCUITS AND TRANSFORMER LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 330.
1 HOUR, OR 0 OR 1/4 UNIT

LECT	A	1	W F	59	E E B
LAB	A	2-5	M W	50M	E E B
LECT	B	1	W F	59	E E B
LAB	B	2-5	TU TH	50M	E E B

E E 332 ELECTRICAL MACHINERY.
PREREQUISITE--E E 330 AND 331, CREDIT OR REGISTRATION IN E E 333.
3 HOURS, OR 0 OR 3/4 UNIT

QUIZ	A	8	MTUWTHF	59	E E B
	A	1	M	59	E E B
QUIZ	B	9	MTUWTHF	59	E E B
	B	1	TU	59	E E B

E E 333 ELECTRICAL MACHINERY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 332.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	50F	E E B
LAB	B	2-5	TU TH	50F	E E B

E E 340 ELECTRONICS.
PREREQUISITE--E.E. 320 AND 321.
3 HOURS, OR 0 OR 3/4 UNIT

QUIZ	A	10	MTUWTHF	261	E E B
	A	1	W	261	E E B

E E 341 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 340.
1 HOURS, OR 0 OR 1/4 UNIT

LAB	A	2-5	TU TH	241	E E B

E E 342 ADVANCED ELECTRONICS.
PREREQUISITE--E.E. 322.
3 HOURS, OR 0 OR 3/4 UNIT

QUIZ	A	10	MTUWTHF	250	E E B
	A	1	W	250	E E B
QUIZ	B	11	MTUWTHF	250	E E B
	B	1	TH	250	E E B

E E 343 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 342.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	245	E E B
LAB	B	2-5	TU TH	245	E E B

E E 350 TRANSMISSION LINES.
PREREQUISITE--E E 320, MATH. 345.
3 HOURS, OR 0 OR 3/4 UNIT

QUIZ	A	10	MTUWTHF	252	E E B
	A	1	W	252	E E B

E E 355 FIELDS AND WAVES.
PREREQUISITE--E.E. 229 AND 350, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 3/4 UNIT

QUIZ	A	8	MTUWTHF	254	E E B
	A	1	M	254	E E B

E E 381 PULSE TECHNIQUES.
PREREQUISITE--E. E. 322, 340, AND 341, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH E. E. 347 AND E. E. 381.
*4 HOURS, OR 0 OR 1 UNIT

QUIZ	A	10	MTUWTHF	257	E E B
	A	1	W	257	E E B
LAB	A	2-5	M W	251	E E B

E E 382 TRANSISTOR CIRCUITS.
PREREQUISITE--E.E. 340 AND 341, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT

QUIZ	A	9	MTUWTHF	260	E E B
	A	1	TU	260	E E B
LAB	A	2-5	TU TH	251	E E B

E E 388 ELECTRONIC ANALOG COMPUTERS.
PREREQUISITE--E.E. 340, 341, MATH. 345 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 1 UNIT

QUIZ	A	11	MTUWTHF	162	E E B
	A	1	TH	162	E E B
LAB	A	ARR			
LAB	B	ARR			

COURSES FOR GRADUATES

E E 416 ADVANCED CIRCUIT ANALYSIS.
1 UNIT

QUIZ	A	9	MTUWTHF	141	E E B
	A	1	TU	141	E E B

E E 420 ELECTROMAGNETIC WAVES AND RADIATING SYSTEMS.
1 UNIT

QUIZ	A	8	MTUWTHF	141	E E B
	A	1	M	141	E E B
QUIZ	B	9	MTUWTHF	250	E E B
	B	1	TU	261	E E B

E E 422 ADVANCED COMMUNICATION NETWORKS.
1 UNIT

QUIZ	A	11	MTUWTHF	260	E E B
	A	1	TH	260	E E B

E E 429 VACUUM TUBE CIRCUIT ANALYSIS.
1 UNIT

QUIZ	A	10	MTUWTHF	260	E E B
	A	1	W	260	E E B

E E 498 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN ELECTRICAL ENGINEERING.
1/2 TO 2 UNITS
*SECTION B RESTRICTED TO STUDENTS ENROLLED IN UI-NSF INSTITUTE
IN ENGINEERING TECHNOLOGY

QUIZ	A	ARR			
QUIZ	*B	11	MTUWTHF	141	E E B
LAB	*B	8-11	TU TH	50N	E E B

E E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	A	ARR

ENGLISH
INCLUDING ENGLISH LITERATURE AND AMERICAN LITERATURE

ENGLISH LITERATURE

DEPARTMENT OFFICE 109 E B

MAJOR--A COURSE IN SHAKESPEARE AND TWENTY ADDITIONAL HOURS IN ENGLISH--EXCLUDING ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND RHET. 101, 102, 107, 108, 151, 200, 271, 272. OF THESE TWENTY ADDITIONAL HOURS, SEVENTEEN MUST BE TAKEN IN ENGLISH OR AMERICAN LITERATURE, INCLUDING THREE HOURS FROM EACH OF THE FOLLOWING GROUPS-1--AMERICAN LITERATURE, 2--ENGLISH LITERATURE PRIOR TO 1688, ENGLISH 235, 311, 320, 325, 326, 342, 345, 3--ENGLISH LITERATURE, 1688-1800, ENGLISH 245, 346, 348, 349, 4--ENGLISH LITERATURE, 1800-PRESENT, ENGLISH 246, 263, 264, 265, 266, 281, 282, 283, 284, 382.

FOR UNDERGRADUATE STUDENTS WHO CONTEMPLATE TAKING ADVANCED WORK OR MAJORING IN ENGLISH, THE FOLLOWING SEQUENCE OF COURSES IS SUGGESTED-FRESHMAN YEAR, FIRST SEMESTER, ENGLISH 101, SECOND SEMESTER, ENGLISH 102 OR 103. SOPHOMORE YEAR, FIRST SEMESTER, ENGLISH 121, SECOND SEMESTER, ENGLISH 122. ENGLISH 121 AND 122 ARE THE NORMAL PREREQUISITE TO THE ENGLISH MAJOR. ENGLISH 105 AND 106 MAY ALSO BE REGARDED AS SATISFYING THIS CONDITION. IN EXCEPTIONAL CASES, HOWEVER, THESE COURSES MAY BE REPLACED BY SIX HOURS FROM AMONG ENGLISH 101, 102, 103, AND 123, OR THEY MAY BE TAKEN CONCURRENTLY WITH ADVANCED COURSES.

MINORS--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC-NOT INCLUDING APPLIED MUSIC-COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THEIR DEPARTMENTS EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED.
STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

ENGLISH MAJORS WHO INTEND TO TEACH IN SECONDARY SCHOOLS MUST SEE THE ADVISER ON SPECIAL CURRICULA.

DEPARTMENTAL DISTINCTION--A STUDENT WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT, 4.0 OR HIGHER, MAY EARN DISTINCTION ONLY BY SUCCESSFULLY COMPLETING ENGL 297 AND 298 IN ADDITION TO THE REGULAR REQUIREMENTS FOR HIS MAJOR. THE LEVEL OF DISTINCTION--DISTINCTION, HIGH DISTINCTION, OR HIGHEST DISTINCTION--IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THE COURSE AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR. TO RECEIVE HIGHEST DISTINCTION HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF, IN THE OPINION OF THE INSTRUCTOR IN ENGL. 297 AND 298 AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

MAJOR IN COMPOSITION--SEE RHETORIC AND COMPOSITION.

COURSES FOR UNDERGRADUATES

ENGL 101 INTRODUCTION TO POETRY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	D	11	MTUWTHF	108	E B		M L JOHNSON
	D	12	TH	108	E B		

ENGL 103 INTRODUCTION TO FICTION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	B	9	MTUWTHF	108	E	B	CURLEY
	B	12	TU	108	E	B	

ENGL 121 CHIEF ENGLISH WRITERS BEFORE 1800.
PREREQUISITE--SOPHOMORE STANDING, OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 121 IN ADDITION TO ENGL. 105.
*3 HOURS

	C	10	MTUWTHF	108	E	B	MILLET
	C	12	W	108	E	B	

ENGL 122 CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 122 IN ADDITION TO ENGL. 106.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	108	E	B	HOGAN
	A	12	M	108	E	B	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 231 SHAKESPEARE, I.
3 HOURS

LECT-DISC	A	8	MTUWTHF	117	E	B	COLE
	A	12	M	117	E	B	

ENGL 246 THE ENGLISH ROMANTIC POETS.
3 HOURS

LECT-DISC	B	9	MTUWTHF	117	E	B	REIMAN
	B	12	W	117	E	B	

ENGL 257 SURVEY OF ENGLISH LITERATURE, I.
PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	C	10	MTUWTHF	117	E	B	HAIG
	C	12	TU	117	E	B	

ENGL 258 SURVEY OF ENGLISH LITERATURE,II.
PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	D	11	MTUWTHF	117	E	B	ROBINS
	D	12	TH	117	E	B	

ENGL 283 ENGLISH LITERATURE IN THE TWENTIETH CENTURY, I.
3 HOURS

LECT-DISC	E	1-3	M W F	117	E	B	WILSON

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 311 CHAUCER.
3 HOURS, OR 3/4 UNIT

LECT-DISC	D	11	MTUWTHF	201	E	B	STILLWELL
	D	12	TH	201	E	B	

ENGL 342 THE POETRY OF MILTON.
3 HOURS, OR 3/4 UNIT

LECT-DISC	C	10	MTUWTHF	201	E	B	ROBINS
	C	12	F	201	E	B	

ENGL 387 THE STRUCTURE OF ENGLISH.
SAME AS LING. 387.
3 HOURS, OR 3/4 UNIT

LECT-DISC	A	8	MTUWTHF	259	E	B	LEES
	A	12	TU	259	E	B	

```
ENGL  403     HISTORY OF THE ENGLISH LANGUAGE.
         1 UNIT
               LECT-DISC  A      8          MTUWTHF   210A E B            SMITH
                          A     12           TU       210A E B


ENGL  411     STUDIES IN SIXTEENTH CENTURY LITERATURE. I.
         1 UNIT
               LECT-DISC  E      1-3         TU TH    108  E B            BERRY


ENGL  413     STUDIES IN SHAKESPEARE.
         1 UNIT
               LECT-DISC  B      9          MTUWTH    223  E B            EVANS


ENGL  422     STUDIES IN EIGHTEENTH CENTURY LITERATURE. II.
         1 UNIT
               LECT-DISC  G      3-5        M  W        1  G H            HAIG


ENGL  427     STUDIES IN THE ROMANTIC MOVEMENT. I.
         1 UNIT
               LECT-DISC  C     10          MTUWTH    110  E B            REIMAN


ENGL  431     STUDIES IN VICTORIAN LITERATURE I.
         1 UNIT
               LECT-DISC  E      1-3        M  W      108  E B            MILLET


ENGL  446     INTRODUCTION TO ADVANCED GRADUATE STUDY.
         REQUIRED OF ALL CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
         IN ENGLISH.
         1/4 UNIT
               LECT-DISC  M     10           TU TH    309  LIB            DAVIDSON


ENGL  464     PROBLEMS IN ELIZABETHAN DRAMA.
         1 UNIT
               LECT-DISC  D     11          MTUWTH    210A E B            EVANS


ENGL  484     PROBLEMS IN TWENTIETH CENTURY ENGLISH LITERATURE.
         PREREQUISITE--CONSENT OF INSTRUCTOR. OR A SURVEY OF ENGLISH
         LITERATURE.
         1 UNIT
               LECT-DISC  G      3-5         TU TH      1  G H            HARKNESS


ENGL  497     INDEPENDENT READING.
         MAY ONLY BE TAKEN CONCURRENTLY WITH A 300-LEVEL COURSE.
         PREREQUISITE--CONSENT OF INSTRUCTOR OF REQUISITE 300-LEVEL COURSE.
         *STUDENTS MAY ACCUMULATE 1/2 UNIT.
         *1/4 UNIT
               CONF             ARR


ENGL  499     THESIS RESEARCH.
         0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
                                BARKER. EVANS. GETTMAN. HAIG.
                                HARKNESS. HERRICK. HOLADAY. HOOK.
                                MCBURNEY. MILLIGAN. ORNSTEIN. KASKE. LEES
                                PAULSON. ROBERTS. ROBINS. ROGERS. SHATTUCK.
                                SMALLEY. SMITH. STILLINGER. STILLWELL.
                                AND WILSON
               CONF             ARR
```

AMERICAN LITERATURE

DEPARTMENT OFFICE 109 E B

COURSES FOR UNDERGRADUATES

ENGL 113 CLASSIC AMERICAN AUTHORS BEFORE THE CIVIL WAR.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102. OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 113 IN ADDITION TO ENGL. 255.
*3 HOURS

LECT-DISC	B	9	MTUWTHF	205	E B	MICHEL
	B	12	W	205	E B	

ENGL 114 CLASSIC AMERICAN AUTHORS AFTER THE CIVIL WAR TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102. OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 114 IN ADDITION TO ENGL. 256.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	201	E B	HAMILTON
	A	12	M	201	E B	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 255 SURVEY OF AMERICAN LITERATURE. I.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 113 AND 255.
*3 HOURS

LECT-DISC	B	9	MTUWTHF	209	E B	ALTENBERND
	B	12	W	209	E B	

ENGL 256 SURVEY OF AMERICAN LITERATURE. II.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 114 AND 256.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	209	E B	MOAKE
	A	12	M	209	E B	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 385 THEMES AND MOVEMENTS IN AMERICAN LITERATURE.
3 HOURS. OR 3/4 UNIT
TOPIC--EUROPE AND AMERICA IN AMERICAN LITERATURE.

LECT-DISC	C	10	MTUWTHF	209	E B	ALTENBERND
	C	12	TU	209	E B	

COURSES FOR GRADUATES

ENGL 488 PROBLEMS IN AMERICAN LITERATURE AND CULTURE.
PREREQUISITE--A SURVEY OF AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY REPEAT COURSE FOR CREDIT.
*1 UNIT
TOPIC--HAWTHORNE AND WHITMAN.

LECT-DISC	A	8	MTUWTH	205	E B	DAVIDSON

ENGL 497 INDEPENDENT READING.
PREREQUISITE--CONSENT OF INSTRUCTOR OR CONCURRENT 300-LEVEL COURSE.
*STUDENTS MAY ACCUMULATE 1/2 UNIT.
*1/4 UNIT
CONF ARR

ENGL 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
DAVIDSON. FLANAGAN. KELLEY
LYNEN. PAUL. AND SCOTT.
CONF ARR

ENTOMOLOGY

DEPARTMENT OFFICE 100C H H

MAJOR--TWENTY HOURS IN ENTOMOLOGY, EXCLUDING ENTOM. 101, 103, AND 131. ZOOL. 318 AND 321 MAY BE APPLIED FOR MAJOR CREDIT. AT LEAST FIVE HOURS MUST BE TAKEN FROM THE ADVANCED GROUP.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--AGRONOMY, BOTANY, CHEMISTRY, HORTICULTURE, MICROBIOLOGY, PHYSIOLOGY, AND ZOOLOGY.

AS A GENERAL POLICY, STUDENTS WHO CONTEMPLATE EVENTUAL CAREERS IN ENTOMOLOGY ARE URGED TO USE THE UNDERGRADUATE YEARS TO GAIN THOROUGH GROUNDING IN THE FUNDAMENTALS OF PHYSICAL AND BIOLOGICAL SCIENCE, IN MATHEMATICS AND THE OTHER LIBERAL ARTS, AND IN THE TECHNIQUES OF COMMUNICATION. THE DEPARTMENT IS GLAD TO ADVISE STUDENTS IN REGARD TO THE MOST EFFECTIVE SCHEDULE OF STUDY TO SUIT THEIR PARTICULAR NEEDS.

ENTOM. 101 AND 103 ARE OPEN TO FRESHMEN, AND 131 TO SOPHOMORES, WITHOUT PREREQUISITES. PREREQUISITES FOR OTHER COURSES ARE INDICATED BELOW.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENTOM 306 SPECIAL PROBLEMS.
PREREQUISITE--ANY OF THE FOLLOWING--ENTOM. 131, 301, 302, 317, 319, 322, OR ZOOL. 101 OR 321, SENIOR STANDING.
2 TO 5 HOURS, OR 1/4 OR 1 UNIT
CONF ARR STAFF

ENTOM 312 ENTOMOLOGY FOR TEACHERS.
PREREQUISITE--ONE YEAR OF BIOLOGY, BOTANY, ZOOLOGY OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT
LAB-DISC A 10-12 MTUW F 310 H H DOWNES

COURSES FOR GRADUATES

ENTOM 499 THESIS--RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--MORPHOLOGY AND EMBRYOLOGY OF INSECTS CHADWICK, STERNBURG
B--APPLIED ENTOMOLOGY DECKER, HORSFALL, KEARNS,
C--SYSTEMATIC ENTOMOLOGY DOWNES, ROSS, SELANDER
D--BIOLOGY AND ECOLOGY OF INSECTS HORSFALL
E--INSECT PHYSIOLOGY CHADWICK, FRAENKEL, WALDBAUER
LAB ARR STAFF

FINANCE

DEPARTMENT OFFICE 311 D K H

REQUIREMENTS FOR L.A.S. STUDENTS

MAJOR--TWENTY HOURS IN FINANCE. A FINANCE MAJOR WHO CHOOSES ECONOMICS AS A MINOR MUST INCLUDE ALSO TWELVE HOURS IN A SECOND MINOR.

ECON. 108 OR ECON. 102 AND 103, ARE FUNDAMENTAL COURSES IN ECONOMICS AND ARE PREREQUISITES FOR COURSES IN FINANCE. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN FINANCE SHOULD TAKE ECON. 108, OR ECON. 102 AND 103, IN THEIR SOPHOMORE YEAR. LIBERAL ARTS MAJORS IN FINANCE ARE ADVISED STRONGLY TO ELECT ACCY. 201 AND A COURSE IN STATISTICS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES IS ACCEPTED AS A MINOR.

COURSES FOR ADVANCED UNDERGRADUATES

FIN 250 MONEY, CREDIT, AND BANKING.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	C	10	MTUWTHFS	123	D K H	CAMMACK

FIN 254 BUSINESS FINANCE.
PREREQUISITE--ECON. 102 AND 103, OR 108, ACCY. 105 OR 201.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	123	D K H	THEILMAN
LECT-DISC	D	11	MTUWTHFS	123	D K H	HEDGES

FIN 259 INVESTMENT.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	11	MTUWTHFS	322	D K H	HEINS

FIN 262 LIFE INSURANCE.
PREREQUISITE--ECON 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	9	MTUWTHFS	123	D K H	CAMMACK

FIN 290 HONORS COURSE.
2 TO 4 HOURS

CONF		ARR				CAMMACK

FIN 295 SENIOR SEMINAR IN FINANCE, II.
PREREQUISITE--SENIOR STANDING, CONSENT OF DEPARTMENTAL ADVISOR.
*TEN SEMESTER HOURS IN THIS DEPARTMENT OR SIXTEEN SEMESTER HOURS DIVIDED BETWEEN THIS AND ANY OTHER DEPARTMENT MAY BE ACCUMULATED
*3 TO 5 HOURS

CONF		ARR				HEDGES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

FIN 369 URBAN LAND PROBLEMS.
PREREQUISITE--FIN. 368 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
DURING THE 1963 SUMMER SESSION THIS SPECIAL WORKSHOP COURSE WILL CARRY 2 HOURS UNDERGRADUATE CREDIT AND NO GRADUATE CREDIT.
JUNE 17 TO JUNE 29, 1963.

LECT-DISC		830-12	MTUWTHF	2158	D K H	STAFF
		1-330	MTUWTHF	2158	D K H	
		830-12	S	2158	D K H	

COURSES FOR GRADUATES

FIN 425 THE MONEY MARKET AND FINANCIAL STABILIZATION.
PREREQUISITE--FIN. 250.
1 UNIT

LECT-DISC	A	8-10	M TH	419	D K H	HEINS

FIN 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT

CONF		ARR				HEDGES

FIN 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF		4-6	TH	419	D K H	HEDGES

FOOD TECHNOLOGY.
INCLUDING DAIRY TECHNOLOGY

DEPARTMENT OFFICE 213 M H

COURSES FOR GRADUATES

F T 406 THE TECHNOLOGY OF FATS AND OILS. II.
PREREQUISITE--CREDIT OR REGISTRATION IN F T 404.
1/2 UNIT
LAB 1-5 MTUWTH B R L ARGOUDELIS

F T 481 ADVANCED STUDIES IN FOOD TECHNOLOGY.
1/2 TO 2 UNITS
CONF ARR STAFF

F T 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

DAIRY TECHNOLOGY

OFFICE 104 D M B

COURSES FOR GRADUATES

D T 491 ASSIGNED PROBLEMS IN DAIRY TECHNOLOGY.
PREREQUISITE--GRADUATE STANDING IN DAIRY TECHNOLOGY.
1/2 TO 2 UNITS
CONF ARR STAFF

D T 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

FORESTRY

DEPARTMENT OFFICE 219 M H

COURSES FOR ADVANCED UNDERGRADUATES

THE FORESTRY COURSES FOR ADVANCED UNDERGRADUATES ARE DESIGNED PRIMARILY FOR STUDENTS WHO ARE CANDIDATES FOR THE PROFESSIONAL DEGREE OF BACHELOR OF SCIENCE IN FORESTRY IN EITHER THE FOREST PRODUCTION OR WOOD TECHNOLOGY AND UTILIZATION CURRICULUM. OTHER STUDENTS ARE ADMITTED TO MOST OF THESE COURSES. HOWEVER. IF THEY HAVE THE PREREQUISITES OR THE CONSENT OF THE INSTRUCTOR.

FOR 211 INTRODUCTION TO SILVICS AND SILVICULTURE--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
CONF ARR BOGGESS. LORENZ. SPAETH

FOR 221 FOREST MENSURATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
CONF ARR JOKELA, MARK

FOR 231 WOOD UTILIZATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
2 HOURS
CONF ARR WALTERS

FRENCH

DEPARTMENT OFFICE 242 L H

MAJOR--TWENTY HOURS IN FRENCH, EXCLUDING FRENCH 101, 102, 103, 113, AND INCLUDING FR. 201, 202, 211, 212 AND AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. STUDENTS ARE ALSO STRONGLY ADVISED TO TAKE A YEARS WORK--TWO COURSES IN EUROPEAN HISTORY AND A YEARS WORK--TWO COURSES--IN ENGLISH LITERATURE. COURSES PARTICULARLY SUITABLE FOR THIS PURPOSE ARE--HIST. 111-112, 211-212, 309-310, 311-312, 313-314, 323-324. ENGL. 101, 102, 103, 105, 106, 121, 122, 123, 131, 231, 232, 245, 246, 251, 252, 253, 257, 258, 263, 264, 281, 282, 283, 284, 363.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT IF TWO ARE CHOSEN--EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR UNDERGRADUATES

FR 101 ELEMENTARY COURSE, I.
FOR STUDENTS WHO HAVE NO CREDIT IN FRENCH.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR FR. 101 WITHOUT FR. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL.
LECT-DISC C1 10-12 MTUWTH 321 L H
LECT-DISC C2 10-12 MTUWTH 302 L H

FR 102 ELEMENTARY COURSE, II.
PREREQUISITE--FR. 101 OR ONE YEAR OF HIGH SCHOOL FRENCH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL.
LECT-DISC 10-12 MTUWTH 303C L H

FR 103 MODERN FRENCH, I.
PREREQUISITE--FR. 102 OR TWO YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
LECT-DISC 8-10 MTUWTH 104 L H

FR 104 MODERN FRENCH, II.
PREREQUISITE--FR. 103 OR THREE YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
LECT-DISC 8-10 MTUWTH 316N M H

COURSES FOR ADVANCED UNDERGRADUATES

FR 202 INTRODUCTION TO FRENCH LITERATURE, II.
PREREQUISITE--FR. 104 OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS
LECT-DISC 11 MTUWTHFS 104 L H DE LEY

FR 211 ORAL FRENCH. I
PREREQUISITE--FR. 104. OR 103 AND 113. OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS

LECT-DISC	B	9	MTUWTHFS	240	L	H	
LECT-DISC	C	10	MTUWTHFS	240	L	H	

FR 212 ORAL FRENCH. II
PREREQUISITE--FR. 211. WITH PERMISSION. FR. 212 MAY BE TAKEN WITH 211 IN THE SUMMER SESSION.
3 HOURS

LECT-DISC		11	MTUWTHFS	316N	M	H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED UNDERGRADUATE COURSES IN FRENCH EXCEPT FR. 382 HAVE THE FOLLOWING PREREQUISITE--FRENCH 201 AND 202 OR EQUIVALENT.

FR 324 FRENCH CLASSICAL LITERATURE. II.
3 HOURS. OR 3/4 UNIT

LECT-DISC		10	MTUWTHFS	104	L	H	MANKIN

FR 334 LA LITTERATURE CONTEMPORAINE. II.
2 HOURS. OR 1/2 UNIT

LECT-DISC		9	MTUWTH	304A	L	H	GRAY

FR 335 CIVILISATION FRANCAISE. I.
STUDENTS WILL BE EXPECTED TO ATTEND A SERIES OF SUPPLEMENTARY DEMONSTRATIONS AND LECTURES NOT TO EXCEED ONE MEETING PER WEEK. DURING THE REGULAR SEMESTER AND TWO MEETINGS PER WEEK IN THE SUMMER SESSION.
2 HOURS. OR 1/2 UNIT

LECT-DISC		2	MTUWTH	240	L	H	MAINOUS

COURSES FOR GRADUATES

FR 400 BEGINNING FRENCH FOR GRADUATE STUDENTS.
4 HOURS. NO GRADUATE CREDIT

LECT-DISC	A1	8-10	MTUWTH	233	L	H	
LECT-DISC	A2	8-10	MTUWTH	303C	L	H	
LECT-DISC	A3	8-10	MTUWTH	321	L	H	
LECT-DISC	C	10-12	MTUWTH	233	L	H	
LECT-DISC	G	3-5	MTUWTH	3	G	H	

FR 401 READING FRENCH FOR GRADUATE STUDENTS.
PREREQUISITE--FR. 400. OR FR. 101 AND 102. OR EQUIVALENT.
4 HOURS. NO GRADUATE CREDIT

LECT-DISC	A	8-10	MTUWTH	302	L	H	
LECT-DISC	E	1-3	MTUWTH	303C	L	H	
LECT-DISC	G	3-5	MTUWTH	4	G	H	

FR 410 ADVANCED SYNTAX.
PREREQUISITE--GRADUATE STANDING IN FRENCH.
1 UNIT

LECT-DISC		8	MTUWTHFS	240	L	H	GRAY

FR 435 SEVENTEENTH CENTURY LITERATURE. I.
PREREQUISITE--GRADUATE STANDING IN FRENCH
1 UNIT

LECT-DISC		11	MTUWTH	240	L	H	WADSWORTH

FR 454 FRENCH REALISM AND NATURALISM. II.
1 UNIT

LECT-DISC		1	MTUWTH	240	L	H	MANKIN

FR 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN FRENCH.
1/4 TO 1 UNIT

CONF		ARR					STAFF

FR 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GENERAL ENGINEERING

DEPARTMENT OFFICE 117 T B

SPECIAL SUMMER COURSE FOR HIGH SCHOOL STUDENTS

G E 010 SUMMER SCIENCE TRAINING PROGRAM FOR HIGH SCHOOL STUDENTS.
THIS PROGRAM IS DESIGNED TO FAMILIARIZE SELECTED HIGH SCHOOL
STUDENTS WITH PAST ACHIEVEMENTS, CURRENT RESEARCH AND PRACTICE,
AND FUTURE NEEDS IN SCIENCE AND ENGINEERING. ENROLLMENT IS
LIMITED TO SUCCESSFUL APPLICANTS TO A 6 WEEK SUMMER SCIENCE
TRAINING PROGRAM SPONSORED BY THE NATIONAL SCIENCE
FOUNDATION TO BE HELD FROM JUNE 24 TO AUGUST 2. NO CREDIT

LAB-DISC	A	8-12	MTUWTHF	216	T B	DOBROVOLNY,
	A	1-4	MTUWTHF	216	T B	MARTIN,
	A	8-12	MTUWTHF	201	T B	AND
	A	1-4	MTUWTHF	201	T B	REYES GUERRA

COURSES FOR UNDERGRADUATES

G E 103 ENGINEERING GRAPHICS, I.
3 HOURS

LAB-DISC	A3	7-9	MTUWTHFS	305	T B	HIPSKIND

G E 104 ENGINEERING GRAPHICS, II.
PREREQUISITE--G.E. 103 OR EQUIVALENT.
3 HOURS

LAB-DISC	A4	8-10	MTUWTHFS	306	T B	SCHECK

COURSES FOR ADVANCED UNDERGRADUATES

G E 220 HISTORY OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS

LAB-DISC	F	1-230	MTU THF	206	T B	BORRI

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

G E 393 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING AND CONSENT OF INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT
*SECTIONS A AND B ARE RESTRICTED TO SUCCESSFUL APPLICANTS TO AN
8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUND-
ATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES
TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. THESE
SECTIONS WILL BE A STUDY OF TECHNICAL EDUCATION PROBLEMS AND WILL
CARRY 1 UNIT OF CREDIT.

LAB-DISC	*A	B	M W F	105	T B	PLACEK
	A	1	TU TH	105	T B	PLACEK
	A	1-3	M W F	114	T B	DOBROVOLNY AND KARNES
LAB-DISC	*B	9	M W F	105	T B	PLACEK
	B	2	TU TH	105	T B	PLACEK
	B	1-3	M W F	114	T B	DOBROVOLNY AND KARNES

DEPARTMENT OFFICE 220 D H

MAJOR--TWENTY HOURS IN GEOGRAPHY IN ADDITION TO GEOGRAPHY 101. AT LEAST FIFTEEN OF THE TWENTY HOURS MUST BE IN COURSES CARRYING ADVANCED CREDIT. INDIVIDUAL PROGRAMS ARE ARRANGED FOR MAJOR STUDENTS WITH THE FOLLOWING SPECIAL INTERESTS--LIBERAL EDUCATION, BUSINESS, CARTOGRAPHY, GOVERNMENT, TEACHING, OR GRADUATE STUDY. THESE PROGRAMS INCLUDE DEPARTMENTAL COURSES, MINOR FIELDS, AND RECOMMENDED ELECTIVES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS IN DEPARTMENTS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED IN CONSULTATION WITH THE DEPARTMENTAL ADVISER AND WITH THE APPROVAL OF THE DEAN OF THE COLLEGE. AT LEAST EIGHT HOURS OF THE TWENTY MINOR HOURS MUST BE TAKEN IN EACH IF THE STUDENT ELECTS TO MINOR IN TWO DIFFERENT DEPARTMENTS.

DEPARTMENTAL DISTINCTION--STUDENTS ELIGIBLE FOR GRADUATION WITH HONORS IN LIBERAL ARTS AND SCIENCES SHOULD CONSULT WITH THE DEPARTMENTAL ADVISER CONCERNING GRADUATION WITH DISTINCTION IN GEOGRAPHY.

COURSES FOR UNDERGRADUATES

GEOG 101 ELEMENTS OF GEOGRAPHY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT	B	9	MTUWTH	323	D H	ROEPKE
QUIZ		3-5	TUWTH	323	D H	

GEOG 111 INTRODUCTORY METEOROLOGY.
PREREQUISITE--GEOG. 101 OR CONSENT OF INSTRUCTOR.
3 HOURS

LECT-DISC	750-850	MTUWTHF	323	D H	PAGE

COURSES FOR ADVANCED UNDERGRADUATES

GEOG 272 INTRODUCTORY FIELD GEOGRAPHY.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
5 TO 8 HOURS DEPENDING ON DURATION OF CAMP.

FIELD CAMP ALLERTON PARK ALEXANDER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOG 332 GEOGRAPHY OF SOUTH AMERICA.
PREREQUISITE--EIGHT HOURS OF GEOGRAPHY, ENROLLMENT IN LATIN-AMERICAN STUDIES PROGRAM, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	10	MTUWTHF	323	D H	PAGE
	1	M	323	D H	

GEOG 353 GEOGRAPHY OF THE U S S R.
PREREQUISITE--EIGHT HOURS OF GEOGRAPHY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	9	MTUWTH	113	D H	FELLMANN
	1-3	TU	113	D H	FELLMANN

GEOG 371 INTRODUCTION TO RESEARCH, I.
LIMITED TO STUDENTS WHOSE MAJOR IS GEOGRAPHY AND TO SENIORS WHOSE MAJOR IS IN OTHER DEPARTMENTS BUT WHO HAVE TWELVE HOURS OF GEOGRAPHY.
2 HOURS, OR 1/2 UNIT

LECT-DISC	ARR				FELLMANN

GEOG 478 ADVANCED FIELD GEOGRAPHY.
PREREQUISITE--GRADUATE STANDING IN GEOGRAPHY.
1 1/4 TO 2 UNITS

FIELD CAMP. ALLERTON PARK FOSTER

GEOG 495 ADVANCED STUDIES IN GEOGRAPHY.
1/2 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--
ECONOMIC GEOGRAPHY ROEPKE
PROBLEMS OF GEOGRAPHY STAFF
CONF ARR ROEPKE. STAFF

GEOG 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GEOLOGY

DEPARTMENT OFFICE 234 N H

MAJOR--TWENTY HOURS IN GEOLOGY. EXCLUDING GEOL. 101. PHYSICAL GEOLOGY. 105. AGRICULTURAL GEOLOGY. AND 150. GEOLOGY FOR ENGINEERS. THE FOLLOWING COURSES. IN ADDITION TO GEOL. 101. PHYSICAL GEOLOGY. ARE FUNDAMENTAL FOR A MAJOR IN GEOLOGY--102. HISTORICAL GEOLOGY. 131 AND 132. MINERALOGY. 301. GEOMORPHOLOGY. 311. STRUCTURAL GEOLOGY 320. PALEONTOLOGY. 321. STRATIGRAPHY. 317. FIELD GEOLOGY IN THE ROCKY MOUNTAINS. G E 205. APPLIED DESCRIPTIVE GEOMETRY IN GEOLOGICAL PROBLEMS. CHEM. 101 OR 102. GENERAL CHEMISTRY. PHYSICS 101. GENERAL PHYSICS. MATH. 112. COLLEGE ALGEBRA. MATH. 114. TRIGONOMETRY. AND MATH. 123 OR 122. ANALYTIC GEOMETRY.

STUDENTS ARE ADVISED TO TAKE MATH. 132 AND 142. OR MATH. 133 AND 143 CALCULUS. AND PHYSICS 102. GENERAL PHYSICS.

STUDENTS WHOSE PRIMARY INTEREST IS MINERALOGY. PETROLOGY. AND MINERAL DEPOSITS SHOULD ALSO TAKE CHEM. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS. AND CHEM. 245 AND 246. PHYSICAL CHEMISTRY FOR ENGINEERS. OR THE EQUIVALENT. IT IS ALSO ADVISABLE FOR SUCH STUDENTS TO TAKE GEOL. 335. OPTICAL MINERALOGY. AND GEOL. 336. PETROGRAPHY. DURING THE SENIOR YEAR.

MINORS--TWENTY HOURS CHOSEN FROM ONE OR TWO OF THE FOLLOWING SUBJECTS--ASTRONOMY. BOTANY. CHEMISTRY. CIVIL ENGINEERING. ECONOMICS GEOGRAPHY. MATHEMATICS. MINING ENGINEERING. PHYSICS. AND ZOOLOGY. AFTER CONSULTATION WITH THE DEPARTMENT OF GEOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

DEPARTMENTAL DISTINCTION--ONLY THOSE STUDENTS WHO HAVE CREDIT IN GEOL. 290 AND WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. EACH STUDENT WHO DESIRES TO REGISTER MUST OBTAIN A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK AND PRESENT IT TO THE HEAD OF THE DEPARTMENT AT THE TIME OF REGISTRATION.

NOTE--CERTAIN GEOLOGY COURSES ARE OFFERED ONLY IN ALTERNATE YEARS--324. VERTEBRATE PALEONTOLOGY. 401. ADVANCED DYNAMIC GEOLOGY. 402. ADVANCED HISTORICAL GEOLOGY. 428. PALYNOLOGY.

AT LEAST ONE YEAR OF GRADUATE WORK IS NECESSARY AS FURTHER TRAINING FOR ALL PROFESSIONAL WORK IN GEOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

GEOL 290 INTRODUCTION TO RESEARCH
PREREQUISITE--CONSENT OF INSTRUCTOR.
CREDIT TO BE ARRANGED.
CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOL 317 FIELD GEOLOGY IN THE ROCKY MOUNTAINS.
PREREQUISITE--GEOL. 102 AND CONSENT OF INSTRUCTOR.
FIELD TRIP. APPROXIMATE COST $250 TO $305.
8 HOURS. OR 2 UNITS
LAB-DISC ARR CROPP. STAFF

COURSES FOR GRADUATES

GEOL 493 ADVANCED STUDIES IN GEOLOGY.
1/2 TO 2 UNITS

CLAY MINERALOGY	GRIM
ENGINEERING GEOLOGY	DEERE. HOUGH
GEOMORPHOLOGY AND GLACIAL GEOLOGY	SHAFFER. WHITE
GEOTECTONICS	CAROZZI
GROUND-WATER GEOLOGY	
MICROPALEONTOLOGY	SCOTT
MINERAL DEPOSITS	HAGNER
MINERALOGY AND CRYSTALLOGRAPHY	HENDERSON
PALEOBOTANY--SEE BOT. 493	KOSANKE. STEWART
PALEONTOLOGY	HAY. SCOTT
PENNSYLVANIAN STRATIGRAPHY	WANLESS
PETROGRAPHY AND PETROLOGY	CHAPMAN
SEDIMENTARY PETROLOGY	CAROZZI. HOUGH. WANLESS
STRATIGRAPHY	LANGENHEIM. SCOTT

CONF ARR STAFF

GEOL 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GERMAN

DEPARTMENT OFFICE 211 L H

MAJOR--TWENTY HOURS IN GERMAN. EXCLUDING GERMAN 101. 102. 103. AND 113. AND INCLUDING AT LEAST SIX HOURS IN COURSES IN THE 300 GROUP--NORMALLY 301 AND 302--OR EQUIVALENT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO SUBJECTS CHOSEN FROM THE FOLLOWING LIST. WITH AT LEAST EIGHT HOURS IN EACH SUBJECT--EDUCATION ENGLISH--EXCLUDING RHET. 101. 102. AND 200--FRENCH. GREEK. HISTORY. ITALIAN. LATIN. LIBRARY SCIENCE. LINGUISTICS--EXCLUDING LING. 301--MEDIEVAL CIVILIZATION STUDIES. PHILOSOPHY. PORTUGUESE. RUSSIAN. AND SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101. GRK. 101. ITAL. 101. LAT. 101. PORT. 101. RUSS. 101. SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT LANGUAGE.

COURSES FOR UNDERGRADUATES

GER 101 ELEMENTARY COURSE. I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR GER. 101 WITHOUT GER. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
TIME TO BE ARRANGED.
LECT-DISC A 8-10 MTUWTH 146 ARMORY

GER 102 ELEMENTARY COURSE, II.
PREREQUISITE--GER. 101 OR ONE YEAR OF HIGH SCHOOL GERMAN.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
TIME TO BE ARRANGED.
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	C	10-12	MTUWTH	235	L	H

GER 103 INTERMEDIATE COURSE, I.
PREREQUISITE--GER. 102, TWO YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
STUDENTS MUST REGISTER FOR 1/2 HOUR OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	A	8-10	MTUWTH	113	L	H

GER 104 INTERMEDIATE COURSE, II.
PREREQUISITE--GER. 103, OR THREE YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS

LECT-DISC	C	10-12	MTUWTH	113	L	H

COURSES FOR ADVANCED UNDERGRADUATES

GER 210 MASTERPIECES OF GERMAN LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GERMAN OR EQUIVALENT.
3 HOURS

LECT-DISC	A	8-10	M W F	235	L	H		STEGEMEIER

GER 291 SENIOR THESIS AND HONORS COURSE.
PREREQUISITE--SENIOR STANDING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

CONF	ARR	

COURSES FOR GRADUATES

GER 400 BEGINNING GERMAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.

LECT-DISC	A1	8-10	MTUWTH	306	L	H
LECT-DISC	A2	8-10	MTUWTH	159	D	H
LECT-DISC	C	10-12	MTUWTH	306	L	H
LECT-DISC	L	7-9PM	MTUWTH	304	L	H

GER 401 READINGS IN GERMAN FOR GRADUATE STUDENTS.
PREREQUISITE--GER. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
*SECTIONS A1, C1 AND L1 DO READINGS PARTICULARLY IN THE HUMANITIES AND THE SOCIAL SCIENCES, SECTIONS A2, C2, AND L2 IN THE NATURAL SCIENCES.

LECT-DISC	A1	8-10	M W F	335	L	H		NOCK
LECT-DISC	A2	8-10	M W F	305	L	H		
LECT-DISC	C1	10-12	M W F	335	L	H		NOCK
LECT-DISC	C2	10-12	M W F	305	L	H		
LECT-DISC	L1	7-9PM	M WTH	335	L	H		
LECT-DISC	L2	7-9PM	M WTH	305	L	H		

GER 493 RESEARCH IN SPECIAL TOPICS.
1 TO 4 UNITS

LECT-DISC	ARR	STEGEMEIER

GER 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS

CONF	ARR	STAFF

GREEK

DEPARTMENT OFFICE 337 L H

MAJOR--TWENTY HOURS, EXCLUDING GREEK 150, 161, AND 318. IN ADDITION CLASSICS 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, LATIN BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

CREDIT FOR NEW TESTAMENT GREEK TRANSFERRED FROM OTHER INSTITUTIONS IS NOT COUNTED TOWARD A MAJOR OR MINOR UNTIL AFTER THE SATISFACTORY COMPLETION OF GREEK 201-202 AND THEN ONLY TO A POSSIBLE MAXIMUM OF EIGHT HOURS AS THE EQUIVALENT OF GREEK 101-102 AND THREE HOURS AS THE EQUIVALENT OF ONE SEMESTER OF GREEK 391.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GRK 391 READINGS IN GREEK LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GREEK, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS.
*3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC 10 MTUWTHFS 303A L H DONOVAN

COURSES FOR GRADUATES

GRK 499 THESIS RESEARCH.
SAME AS LAT. 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

HEALTH EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

H ED 281 FIRST AID.
2 HOURS
LECT-DISC D 11 MTUWTH 207A HUFF GYM HUFFMAN

H ED 282 ORGANIZATION OF SCHOOL HEALTH PROGRAMS.
3 HOURS
LECT-DISC A 7-9 M 209 HUFF GYM HUFFMAN
A 8 TUWTHF 209 HUFF GYM HUFFMAN

COURSES FOR GRADUATES

H ED 404 TRENDS AND ISSUES IN SEX EDUCATION.
PREREQUISITE--UNDERGRADUATE COURSES IN BIOLOGICAL AND SOCIAL SCIENCES OR CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 10 MTUWTH 207A HUFF GYM HUFFMAN

H ED 490 SEMINAR.
NO CREDIT
LECT-DISC 2-4 TU TH 211 HUFF GYM HUFFMAN

H ED 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

HISTORY

DEPARTMENT OFFICE 325 L H

MAJOR--TWENTY HOURS IN HISTORY, INCLUDING AT LEAST TEN HOURS IN COURSES HAVING JUNIOR STANDING AS A PREREQUISITE, AND NOT INCLUDING MORE THAN FOUR HOURS IN COURSES OPEN TO FRESHMEN. THE COURSES OFFERED MUST INCLUDE AT LEAST SIX HOURS IN AMERICAN HISTORY, SIX HOURS IN MODERN EUROPEAN HISTORY SINCE 1500, AND SIX HOURS IN OTHER FIELDS OF HISTORY.

MINORS--TWENTY HOURS, NOT INCLUDING MORE THAN FOUR HOURS OPEN TO FRESHMEN, IN ONE OR TWO OF THE FOLLOWING--ANCIENT OR MODERN LANGUAGE EXCLUDING ELEMENTARY COURSES 101 AND 102, ANTHROPOLOGY, ECONOMICS, ENGLISH AND AMERICAN LITERATURE, GEOGRAPHY, LAW, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, AND SOCIOLOGY.
ONE OF THE CURRICULA IN LATIN AMERICAN STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR, EXCLUDING THE COURSES IN HISTORY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 121 AND 122, HISTORY OF CIVILIZATION, ARE ACCEPTED AS SATISFYING THE PREREQUISITE OF A YEAR OF COLLEGE HISTORY IN ALL CASES IN WHICH IT IS REQUIRED.

HIST 111 HISTORY OF MODERN CIVILIZATION TO 1815.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		9	MTUWTH	110	L H	SIRICH
DISC	A	10	MTUWTH	114	L H	SHAY

HIST 151 HISTORY OF THE UNITED STATES TO 1865.
PREREQUISITE--SOPHOMORE STANDING.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 151 AND 261.
*4 HOURS

LECT		9	MTUWTH	106	L H	ROSKE
DISC	A	10	MTUWTH	123	L H	STEARNS

HIST 152 HISTORY OF THE UNITED STATES FROM 1865 TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 152 AND 262.
*4 HOURS

LECT		8	MTUWTH	106	L H	BATES
DISC	A	9	MTUWTH	114	L H	CRAWFORD
DISC	B	10	MTUWTH	232	L H	BATES
DISC	C	11	MTUWTH	232	L H	SPENCE

COURSES FOR ADVANCED UNDERGRADUATES

NOTE--JUNIOR STANDING IS REQUIRED EXCEPT WHERE NOTED.

HIST 210 THE NEAR EAST FROM NAPOLEON TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
2 HOURS

LECT		10	MTUWTH	110	L H	DAWN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--JUNIOR STANDING AND ONE YEAR OF COLLEGE HISTORY
IS REQUIRED EXCEPT WHERE NOTED.

HIST 304 MEDIEVAL CIVILIZATION.
PREREQUISITE--ONE YEAR OR COLLEGE HISTORY OR POLITICAL SCIENCE.
3 HOURS. OR 1/2 OR 1 UNIT
LECT 9 MTUWTHFS 123 L H GEANAKOPLOS

HIST 314 EUROPEAN HISTORY FROM 1929 TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE
3 HOURS. OR 1/2 OR 1 UNIT
LECT 8 MTUWTHFS 329 L H SHAY

HIST 324 SCIENCE, IDEALISM, AND MATERIALISM.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT
LECT 11 MTUWTHFS 329 L H STEARNS, SIRICH

HIST 358 SOCIAL AND ECONOMIC HISTORY OF THE UNITED STATES SINCE 1860.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
3 HOURS. OR 1/2 OR 1 UNIT
LECT 9 MTUWTHFS 329 L H SPENCE

HIST 359 THE CIVIL WAR AND RECONSTRUCTION.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY.
3 HOURS. OR 1/2 OR 1 UNIT
LECT 11 MTUWTHFS 114 L H ROSKE

HIST 376 HISTORY OF LATIN AMERICA SINCE 1824.
PREREQUISITE--ONE COURSE IN COLLEGE HISTORY.
3 HOURS. OR 1/2 OR 1 UNIT
LECT 10 MTUWTHFS 329 L H GARDINER

HIST 394 MODERN CHINA--CHINA SINCE 1840.
PREREQUISITE--1 YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT
LECT 11 MTUWTHFS 123 L H CRAWFORD

COURSES FOR GRADUATES

HIST 401 SEMINAR IN MEDIEVAL HISTORY.
1 UNIT
DISC 3-5 TU TH 424B LIB GEANAKOPLOS

HIST 476 SEMINAR IN LATIN-AMERICAN HISTORY--THE REVOLUTIONARY PERIOD.
1 UNIT
DISC 3-5 M W 46 G H GARDINER

HIST 495 HISTORICAL METHOD.
1 UNIT
LECT 8 MTUWTH 114 L H DAWN

HIST 497 READING COURSE.
PREREQUISITE--MASTERS DEGREE OR EQUIVALENT, CONSENT OF
INSTRUCTOR.
1 UNIT
CONF ARR STAFF

HIST 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

DEPARTMENT OFFICE 260 B H

COURSES FOR ADVANCED UNDERGRADUATES

H EC 273 HOME MANAGEMENT.
PREREQUISITE--ECON. 102 AND 103, OR 108. H. EC. 105, 133, 160, 171, 183, 184, CONSENT OF INSTRUCTOR.
3 HOURS
*ADDITIONAL HOURS TO BE ARRANGED DURING 4 WEEKS RESIDENCE IN HOME MANAGEMENT HOUSE.
FIRST FOUR WEEKS--JUNE 18 TO JULY 13.

LECT	9-11	M	154	BEV HALL	GUTHRIE
LAB	*9-11	TUWTHF	1202	W GREEN	GUTHRIE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

H EC 330 EXPERIMENTAL FOODS.
PREREQUISITE--H. EC. 231, MCBIO. 100, 101.
*FOR 1 UNIT TWO ADDITONAL HOURS WILL BE SCHEDULED.
*3 HOURS, OR 1/2 OR 1 UNIT

LAB-DISC	1	TU TH	328	BEV HALL	JANSSEN
	1-4	M W	362	BEV HALL	JANSSEN
	2-5	TU TH	362	BEV HALL	JANSSEN

H EC 351 SPECIAL PROBLEMS IN GROUP FEEDING.
PREREQUISITE--H. EC. 220, 231, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR H. EC. 351 IN ADDITION TO H. EC. 240, 345, OR 350.
*3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 18 TO JULY 13.

LAB-DISC	8-1230	MTUWTHF	292	BEV HALL	BONNELL, HOUSE

H EC 375 HOME EQUIPMENT.
PREREQUISITE--H. EC. 171, SIX ADVANCED HOURS IN HOME ECONOMICS INCLUDING ONE OF THE FOLLOWING--H. EC. 231, 273, 380, SENIOR STANDING, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT	9	TUWTHF	166	BEV HALL	HERNDON
LAB	9-11	TUWTHF	166	BEV HALL	

H EC 378 PROBLEMS IN HOME MANAGEMENT.
PREREQUISITE--H. EC. 270 OR 262, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

CONF	ARR				GOODYEAR

H EC 380 ADVANCED TEXTILES.
PREREQUISITE--CHEM. 132, H. EC. 183.
4 HOURS, OR 1 UNIT

LECT	1-3	M F	208	BEV HALL	CROUTHAMEL
LAB	2-5	M F	201	BEV HALL	
	1-5	W	201	BEV HALL	

H EC 388 PROBLEMS IN TEXTILES AND CLOTHING.
PREREQUISITE--H. EC. 286 OR 380, OR MKTG. 211, MINIMUM GRADE POINT AVERAGE OF 3.5, SENIOR STANDING IN HOME ECONOMICS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

CONF	ARR				GALBRAITH

COURSES FOR GRADUATES

H EC 410 PROBLEMS IN FAMILY LIVING.
PREREQUISITE--H. EC. 210.
1 UNIT

DISC	1-3	TU TH	449	BEV HALL	MOWRER

H EC 493 ADVANCED STUDIES IN HOME ECONOMICS.
1/2 OR 1 UNIT
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--THE CHILD AND THE FAMILY
B--FAMILY ECONOMICS
C--FOODS
D--NUTRITION
E--TEXTILES AND CLOTHING
CONF ARR STAFF

H EC 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--THE CHILD AND THE FAMILY	MOWRER. RAPP
B--FAMILY ECONOMICS	DUNSING
C--FOODS	OSMAN. VAN DUYNE
D--NUTRITION	HOLMES. SMITH
E--TEXTILES AND CLOTHING	GALBRAITH

CONF ARR

HORTICULTURE

DEPARTMENT OFFICE 124 M H

COURSES FOR ADVANCED UNDERGRADUATES

HORT 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5. NOT OPEN TO STUDENTS ON PROBATION. SENIOR STANDING. CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR A THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--POMOLOGY	LOTT. SIMONS. TITUS. ZYCH
B--VEGETABLE CROPS	ARNOLD. MCCOLLUM. THOMPSON VANDEMARK
C--FLORICULTURE	ACKERMAN. CULBERT. FOSLER. GARTNER. KEMMERER. NELSON
D--FRUIT BREEDING	BIRKELAND. DAYTON
E--APICULTURE	

CONF ARR STAFF

COURSES FOR GRADUATES

HORT 492 SPECIAL TOPICS IN HORTICULTURE.
PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
1/2 TO 2 UNITS
CONF ARR STAFF

HORT 499 THESIS RESEARCH.
REQUIRED IN MAJOR IN HORTICULTURE. PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--FLORICULTURE	CULBERT. GARTNER.
B--FRUIT BREEDING	BIRKELAND. DAYTON
C--POMOLOGY	LOTT. SIMONS. TITUS
D--VEGETABLE CROPS	ARNOLD. MCCOLLUM. THOMPSON

CONF ARR STAFF

HYGIENE

DEPARTMENT OFFICE HEALTH CENTER

COURSES FOR ADVANCED UNDERGRADUATES

HYG 200 MENTAL HEALTH.
2 HOURS
LECT-DISC A 11 MTUWTH 393 BEV HALL

HYG 206 SEX EDUCATION AND FAMILY LIFE.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LECT-DISC A 9 MTUWTH 393 BEV HALL TEIGLER

INDUSTRIAL EDUCATION

DEPARTMENT OFFICE 332 G H

COURSES FOR UNDERGRADUATES

I ED 189 INDUSTRIAL PRACTICES.
PREREQUISITE--SOPHOMORE STANDING. ENROLLMENT IN INDUSTRIAL EDUCATION OPTIONS II AND III.
*STUDENTS MAY ACCUMULATE SEVENTEEN HOURS.
*2 OR 3 HOURS
PRACT ARR SCHILL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

I ED 384 THE GENERAL SHOP PROGRAM.
SAME AS ED. 384.
PREREQUISITE--SIXTEEN HOURS IN INDUSTRIAL EDUCATION.
4 HOURS. OR 1 UNIT
LAB 8 MTUWTHFS 102 WOODSHOP HOUSEHOLDER
9-12 TUWTHF 105 WOODSHOP

ITALIAN

DEPARTMENT OFFICE 218 L H

MAJOR--TWENTY HOURS IN ITALIAN. EXCLUDING ITALIAN 101 AND 102. AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. HISTORY 217. LINGUISTICS 300 AND ITALIAN 291 AND 292 ARE ACCEPTABLE. ITALIAN 291 AND 292 FOR MAJORS CAN BE ARRANGED FOR ADVANCED GROUP CREDIT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS. WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--
EDUCATION. ENGLISH. EXCLUDING RHET. 101 AND 102. FRENCH. GERMAN. GREEK. HISTORY. LATIN. LIBRARY SCIENCE. MEDIEVAL CIVILIZATION STUDIES. PHILOSOPHY. PORTUGUESE. RUSSIAN. AND SPANISH.

COURSES FOR GRADUATES

ITAL 491 SPECIAL TOPICS IN ITALIAN.
1/2 OR 1 UNIT
CONF ARR STAFF

ITAL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
CONF ARR ALLEN

JOURNALISM

DEPARTMENT OFFICE 115 G H

COURSES FOR ADVANCED UNDERGRADUATES

JOURN 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS
CONF ARR JENSEN

COURSES FOR GRADUATES

JOURN 473 HISTORY AND THEORY OF FREEDOM OF THE PRESS.
SAME AS COMM. 473.
1 UNIT
LECT-DISC 10-12 TU TH 123 G H JENSEN

JOURN 490 SPECIAL TOPICS IN JOURNALISM.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 OR 1 UNIT
CONF ARR JENSEN

JOURN 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN JOURNALISM.
1 TO 2 UNITS
CONF ARR JENSEN

LABOR AND INDUSTRIAL RELATIONS

DEPARTMENT OFFICE 704 S SIXTH

COURSES FOR GRADUATES

L I R 442 COLLECTIVE BARGAINING.
SAME AS ECON. 442.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC ARR STAFF

L I R 490 INDIVIDUAL TOPICS.
1/2 TO 2 UNITS
CONF ARR STAFF

L I R 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

LANDSCAPE ARCHITECTURE

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

L A 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

LATIN

DEPARTMENT OFFICE 337 L H

MAJOR--TWENTY HOURS, EXCLUDING LATIN 101, 102, 103, AND 162, AND INCLUDING SIX HOURS IN TRANSLATION COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES. IN ADDITION, CLASSICS 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE. IN ADDITION TO THESE TWENTY HOURS IN THE LANGUAGE, STUDENTS WHOSE MAJOR IS LATIN AND WHO PLAN TO TEACH THE SUBJECT ARE ALSO REQUIRED TO TAKE CLASSICS 101, LATIN 162, AND A THREE-HOUR COURSE IN THE HISTORY OF THE ROMAN REPUBLIC. SEE HIST. 383.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, GREEK BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LAT 391 READINGS IN LATIN LITERATURE.
PREREQUISITE--THREE YEARS OF COLLEGE LATIN OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS.
*3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC 9 MTUWTHFS 303A L H BATEMAN

COURSES FOR GRADUATES

LAT 416 VERGIL.
1 UNIT
LECT-DISC 11-1230 M W F 303A L H BATEMAN

LAT 499 THESIS RESEARCH.
SAME AS GRK. 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

LATIN-AMERICAN STUDIES PROGRAM

DEPARTMENT OFFICE 124 D H

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

STUDENTS MAY ELECT THE LATIN-AMERICAN STUDIES PROGRAM AS EITHER A MAJOR OR A MINOR. IN BOTH CASES STUDENTS FOLLOW THE SAME PROGRAM. STUDENTS WHO ELECT LATIN-AMERICAN STUDIES AS A MAJOR OR MINOR SHALL BE REQUIRED TO--

1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE GENERAL CURRICULUM.

2-COMPLETE SIX SEMESTERS OR EQUIVALENT OF COLLEGE SPANISH OR PORTUGUESE. IF A STUDENT WISHES TO TAKE BOTH SPANISH AND PORTUGUESE HE MAY TAKE TWO YEARS OF EACH TO SATISFY THIS REQUIREMENT. IN THE CASE OF WELL-QUALIFIED STUDENTS THE LANGUAGE REQUIREMENT MAY BE MODIFIED.

3-COMPLETE AT LEAST TWENTY SEMESTER HOURS FROM THE COURSES LISTED BELOW. INCLUDING SOC. S. 101 AND/OR 102 AND SOC. S. 301. CHOSEN FROM AMONG FOUR DEPARTMENTS. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE LATIN-AMERICAN STUDIES PROGRAM MAY NOT BE INCLUDED WITHIN THIS TWENTY HOURS.

ANTH. 271. 350. 352. 361. 380
ART 318

ECON. 328. 329
GEOG. 231. 332
HIST. 375. 376. 377

PHIL. 319
POL. S. 342. 343
PORT. 301. 303. 304. 305. 306
SOC. S. 101. 102. 301
SOC. 373
SPAN. 202. 303. 304

MINORS--STUDENTS WHO MAJOR IN LATIN-AMERICAN STUDIES MAY ELECT MINORS AS FOLLOWS--TWENTY HOURS. EXCLUDING COURSES TAKEN IN FRESHMAN YEAR. IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS. WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN AGRICULTURAL ECONOMICS. ANTHROPOLOGY. ECONOMICS. GEOGRAPHY. HISTORY. HISTORY OF ART. LINGUISTICS. PHILOSOPHY. POLITICAL SCIENCE. PORTUGUESE. SPANISH. SOCIAL WORK. AND SOCIOLOGY.

SPLIT MINOR--STUDENTS MAY SPLIT A MINOR BETWEEN LATIN-AMERICAN STUDIES AND ANOTHER DEPARTMENT. BUT MUST MEET THE LANGUAGE REQUIREMENT AND TAKE AT LEAST TWELVE SEMESTER HOURS FROM LATIN-AMERICAN STUDIES. INCLUDING SOC. S. 301. AND COURSES FROM AT LEAST TWO DEPARTMENTS IN THE CURRICULUM EXCLUSIVE OF COURSES USED IN THE MAJOR DEPARTMENT.

GRADUATE MINOR IN LATIN-AMERICAN STUDIES

CANDIDATES FOR THE MASTERS DEGREE MUST ELECT A MINIMUM OF TWO UNITS FOR A MINOR IN THIS PROGRAM. DOCTORAL CANDIDATES WHO ELECT LATIN-AMERICAN STUDIES AS A SOLE MINOR MUST EARN A MINIMUM OF FOUR UNITS OF CREDIT IN APPROVED COURSES. FOR A SPLIT MINOR. AT LEAST THREE UNITS OF CREDIT MUST BE EARNED. THE COURSES FOR ALL GRADUATE MINORS IN LATIN-AMERICAN STUDIES MUST BE TAKEN IN AT LEAST TWO DEPARTMENTS OR SUBJECTS AND MUST BE APPROVED BY THE DIRECTOR OF LATIN-AMERICAN STUDIES. COURSES IN THE FOLLOWING LIST MAY BE INCLUDED IN THE GRADUATE MINOR.

AG. EC. 401
ANTH. 350, 352, 361, 380, 490
ART 318, 491
BOT. 300

ECON. 328, 329, 411, 490

GEOG. 332, 495

HIST. 375, 376, 377, 476
PHIL. 319, 483
POL. S. 342, 343, 493
PORT. 301, 303, 304, 305, 306, 491
SOC. S. 301
SOC. 373, 490
SPAN. 303, 304, 431, 432, 433 434, 435, 436

STUDENTS IN OTHER COLLEGES

STUDENTS IN TECHNICAL AND PROFESSIONAL COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF LATIN-AMERICAN AFFAIRS, CULTURE, AND LANGUAGES ARE INVITED TO CONSULT WITH MEMBERS OF THE TEACHING STAFF OF THE LATIN-AMERICAN STUDIES PROGRAM, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH A PROGRAM MAY OFTEN BE ADOPTED AS A SPECIAL MINOR UNDER EXISTING REGULATIONS IF THE STUDENT SO DESIRES. IT IS RECOGNIZED THAT THE NUMBER OF ELECTIVE HOURS AVAILABLE FOR SUCH SPECIAL AREA STUDIES VARIES AMONG MANY OF THE EIGHT AND TEN SEMESTER PROGRAMS IN THE UNIVERSITY, BUT MOST STUDENTS WISHING TO INCREASE THEIR PROFICIENCY IN LATIN-AMERICAN AFFAIRS CAN DO SO WITHOUT EXCESSIVE OVERCROWDING OF SCHEDULES. THESE COURSES ARE OF PARTICULAR VALUE TO STUDENTS WHO INTEND TO CARRY ON TECHNICAL OR PROFESSIONAL WORK IN THE LATIN AMERICAN AREA FOR THE GOVERNMENT, PRIVATE BUSINESS, PUBLICATIONS, OR RELIGIOUS ORGANIZATIONS.

LAW

DEPARTMENT OFFICE 209 LAW

COURSES FOR FIRST-YEAR LAW STUDENTS

LAW 302 CONTRACTS B.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
*3 HOURS, OR 1 UNIT
PATTERSON, GOBLE & JONES, CASES ON CONTRACTS, 4TH ED.

LECT-DISC	A	11	WTHFS	A LAW	DAVIS
	A	10	FS	A LAW	DAVIS

LAW 304 TORTS B.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
*3 HOURS, OR 1 UNIT
GREGORY & KALVEN, CASES ON TORTS.

LECT-DISC	A	8	MTU	A LAW	BOWMAN
	A	9	MTUWTH	A LAW	BOWMAN

COURSES FOR ADVANCED LAW STUDENTS

LAW 323 ADMINISTRATIVE LAW.
3 HOURS, OR 1 UNIT
GELLHORN & BYSE, CASES ON ADMINISTRATIVE LAW, 3D ED.

LECT-DISC	A	11	MTU	B LAW	COHN
	A	10	MTUWTH	B LAW	COHN

LAW 330 RESTITUTION.
3 HOURS, OR 1 UNIT
WADE, CASES ON RESTITUTION.

LECT-DISC	A	11	WTHFS	B LAW	THODE
	A	10	FS	B LAW	THODE

LAW 333 PERSONS.
2 HOURS. OR 1/2 UNIT
JACOBS & GOEBEL. CASES ON DOMESTIC RELATIONS. 3D ED.

LECT-DISC	A	1	W	E LAW	CARLSTON
	A	2	WTHF	E LAW	CARLSTON

LAW 342 MORTGAGES.
3 HOURS. OR 1 UNIT
OSBORNE. PROPERTY SECURITY. 2D ED.

LECT-DISC	A	8	MTU	E LAW	HOLT
	A	9	MTUWTH	E LAW	HOLT

LAW 356 FEDERAL COURTS.
3 HOURS. OR 1 UNIT
HART & WECHSLER. THE FEDERAL COURTS AND THE FEDERAL SYSTEM. AND
HART & WECHSLER. THE JUDICIAL CODE AND RULES OF PROCEDURE IN THE
FEDERAL COURTS--STUDENTS ED.. 1962 REV.

LECT-DISC	A	8	WTHFS	A LAW	
	A	9	FS	A LAW	

LAW 361 PROBLEMS AND PROCEDURES IN OFFICE PRACTICE.
1 HOUR

LECT-DISC	A	3	THF	E LAW	CARLSTON

LAW 363 PROBATE PRACTICE.
1 HOUR

LECT-DISC	A	3-5	W	E LAW	SCOLES

LAW 378 SEMINAR--CONFLICT OF LAWS.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	2-4	MTU	E LAW	SCOLES

LAW 399 RESEARCH ON SPECIAL TOPICS.
1 TO 4 HOURS. OR 1/2 OR 1 UNIT

CONF	A	ARR	STAFF

COURSES FOR GRADUATES

LAW 499 THESIS RESEARCH.
1/2 TO 2 UNITS

CONF	A	ARR	STAFF

LIBRARY SCIENCE

DEPARTMENT OFFICE 331 LIB

FOR ALL STUDENTS

COLLOQUIUM--TALKS AND DISCUSSIONS BY PROMINENT LIBRARIANS AND OTHER LEADERS ASSOCIATED WITH LIBRARY INTERESTS. OR WITH THE PRODUCTION AND DISTRIBUTION OF BOOKS AND COMPARABLE MEDIA. ALL STUDENTS ARE REQUIRED TO ATTEND.
NO CREDIT

COURSES FOR ADVANCED UNDERGRADUATES

LIB S 201 USE OF BOOKS AND LIBRARIES.
3 HOURS

LECT-DISC	8	MTUWTHFS	309	LIB	CORDELL

LIB S 204 DEVELOPMENT AND OPERATION OF LIBRARIES.
3 HOURS OR 2 HOURS IN SUMMER.

LECT-DISC	1	MTU THF	118	LIB	PARKER

LIB S 255 ORGANIZATION OF LIBRARY MATERIALS.
PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	A	9	MTUWTHFS	314	LIB	FOX
LECT-DISC	B	11	MTUWTHFS	314	LIB	FOX

LIB S 258 SELECTION OF LIBRARY MATERIALS.
3 HOURS. OR 2 HOURS IN SUMMER

LECT-DISC	2	MTU THF	118	LIB

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LIB S 301 LITERATURE OF THE HUMANITIES AND SOCIAL SCIENCES.
3 HOURS. OR 1 UNIT

LECT-DISC	10-12	M TH	428	LIB	CORDELL

LIB S 303 LIBRARY MATERIALS FOR CHILDREN.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	1-3	M W F	314	LIB	LADLEY

LIB S 304 LIBRARY MATERIALS FOR YOUNG ADULTS.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	10-12	M W F	309	LIB	THOMASSEN

LIB S 309 STORYTELLING.
3 HOURS. OR 1/2 OR 1 UNIT

LECT-DISC	1-3	TU TH	314	LIB	LADLEY

COURSES FOR GRADUATES

LIB S 405 LIBRARY ADMINISTRATION.
1 UNIT

LECT-DISC	3-5	M TH	118	LIB	GOLDSTEIN

LIB S 407 CATALOGING AND CLASSIFICATION. I.
1 UNIT

LECT-DISC	8	MTUWTHFS	314	LIB	OLDFATHER

LIB S 409 COMMUNICATION ROLES AND RESPONSIBILITIES OF LIBRARIES.
1 UNIT

LECT-DISC	3-5	TU F	314	LIB	GOLDSTEIN

LIB S 411 BIBLIOGRAPHY OF THE HUMANITIES AND SOCIAL SCIENCES.
1 UNIT

LECT-DISC	9	MTUWTHFS	309	LIB	CORBITT

LIB S 424 GOVERNMENT PUBLICATIONS.
1 UNIT

LECT-DISC	1-3	M TH	428	LIB	

LIB S 427 RESOURCES OF AMERICAN LIBRARIES.
1 UNIT

LECT-DISC	3-5	TU F	428	LIB	CORBITT

LIB S 429 INFORMATION STORAGE AND RETRIEVAL.
PREREQUISITE--LIB. S. 405 AND CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	3-5	M TH	314	LIB	PARKER

LIB S 431 HISTORY OF LIBRARIES.
1/2 OR 1 UNIT
LECT-DISC 10-12 TU F 428 LIB OLDFATHER

LIB S 433 ADVANCED SUBJECT BIBLIOGRAPHY.
SAME AS GEOG. 433.
PREREQUISITE--LIB. S. 411 OR 412.
*NO STUDENT MAY REGISTER MORE THAN TWICE FOR CREDIT TOWARD A DEGREE.
*1/2 UNIT
SECTION D-EDUCATION. SECTION F-JOURNALISM. SECTION I-MUSIC.
LECT-DISC D 10-12 TH 328 LIB STENSTROM
LECT-DISC F 10-12 W 328 LIB BLUM
LECT-DISC I 8 M TH 328 LIB ALLEN

LIB S 441 HISTORY OF CHILDRENS LITERATURE.
1 UNIT
LECT-DISC 8-10 TU TH 428 LIB THOMASSEN

COURSES FOR ADVANCED GRADUATES

LIB S 450 ADVANCED PROBLEMS IN LIBRARIANSHIP.
PREREQUISITE--A FIFTH-YEAR DEGREE IN LIBRARY SCIENCE. CONSENT OF ASSOCIATE DIRECTOR.
1/2 TO 2 UNITS
CONF ARR STAFF

LIB S 469 PRINCIPLES OF RESEARCH METHODS.
PREREQUISITE--KNOWLEDGE OF THE PRINCIPLES OF STATISTICS. MASTER OF SCIENCE IN LIBRARY SCIENCE OR CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 10-12 TU F 328 LIB GOLDMOR

LIB S 499 THESIS RESEARCH.
MS CANDIDATES--0 TO 2 UNITS. PHD CANDIDATES--0 TO 4 UNITS
CONF ARR STAFF

LINGUISTICS

DEPARTMENT OFFICE 300 ENGLISH

A GRADUATE PROGRAM LEADING TO THE DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY IN LINGUISTICS IS OFFERED BY THE DIVISION OF SOCIAL SCIENCES. THE FOLLOWING FIELDS OF LINGUISTICS ARE AVAILABLE FOR CONCENTRATION--DESCRIPTIVE LINGUISTICS. HISTORICAL LINGUISTICS. PSYCHOLINGUISTICS. ETHNOLINGUISTICS. AND EXPERIMENTAL PHONETICS.

UNDERGRADUATE PREPARATION FOR THE STUDY OF LINGUISTICS SHOULD INCLUDE A BROAD BACKGROUND IN THE LIBERAL ARTS AND SCIENCES. STUDENTS APPLYING FOR ADMISSION MUST HAVE AT LEAST A 3.5 GRADE POINT AVERAGE FOR THAT PORTION OF THE WORK WHICH REPRESENTS THE LAST SIXTY HOURS EARNED TOWARDS THE BACHELORS DEGREE. EXCLUSIVE OF REQUIRED PHYSICAL EDUCATION AND MILITARY TRAINING.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LING 300 INTRODUCTION TO LINGUISTICS.
SAME AS COMM. 300.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES. OR EQUIVALENT.
3 HOURS. OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED
LECT-DISC 11 MTUWTHF 108 L H HALE
10 TH 108 L H

LING 301 INTRODUCTION TO PHONETICS.
SAME AS SPCH. 301.
PREREQUISITE--JUNIOR STANDING.
3 HOURS. OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED.

LECT-DISC	10	MTUWTH	304	L H	HULTZEN
	3	TU TH	330	I H	

LING 376 SPEECH SCIENCE. II.
SAME AS SPCH. 376.
PREREQUISITE--LING. 375 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 UNIT
*ONE HOUR TO BE ARRANGED.

LECT-DISC 3	*9	MTUWTHF	104	SP CLINIC	ZEMLIN

COURSES FOR GRADUATES

LING 490 SPECIAL TOPICS IN LINGUISTICS.
1/2 TO 2 UNITS
CONF ARR

LING 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR

MANAGEMENT

DEPARTMENT OFFICE 317B D K H

COURSES FOR UNDERGRADUATES

MGMT 101 INDUSTRIAL ORGANIZATION AND MANAGEMENT.
PREREQUISITE--ECON. 102 OR CONSENT OF INSTRUCTOR. FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN IN BOTH MGMT. 101 AND I. E. 237.
*3 HOURS

LECT-DISC A	8	MTUWTHFS	312	D K H	PERRY

COURSES FOR ADVANCED UNDERGRADUATES

MGMT 248 PERSONNEL ADMINISTRATION.
PREREQUISITE--ECON. 102 OR 108.
3 HOURS

LECT-DISC B	9	MTUWTHFS	307	D K H	HECKMANN

COURSES FOR GRADUATES

MGMT 402 SCIENTIFIC MANAGEMENT QUANTITATIVE
1 UNIT

LECT-DISC	10-12	TU TH	420	D K H	MANDEVILLE

MGMT 499 THESIS RESEARCH.
1 UNIT

CONF	ARR				MANDEVILLE

DEPARTMENT OFFICE 411 D K H

COURSES FOR UNDERGRADUATES

MKTG 101 PRINCIPLES OF MARKETING.
PREREQUISITE--ECON. 102 OR 108. AND FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN IN BOTH MKTG. 101 AND 272.
#3 HOURS
LECT-DISC C 10 MTUWTHFS 306 D K H SCOTTON

COURSES FOR ADVANCED UNDERGRADUATES

MKTG 211 PRINCIPLES OF RETAILING.
PREREQUISITE--MKTG. 101.
3 HOURS
LECT-DISC D 11 MTUWTHFS 306 D K H SCOTTON

MKTG 281 INTRODUCTION TO ADVERTISING.
SAME AS ADV. 281.
PREREQUISITE--JUNIOR STANDING.
3 HOURS
LECT-DISC B 9 MTUWTHFS 113 G H MOYER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MKTG 305 CONTEMPORARY PROBLEMS IN MARKETING MANAGEMENT.
PREREQUISITE--MKTG. 101. SENIOR STANDING.
3 HOURS. OR 1/2 UNIT
LECT-DISC C 10 MTUWTHFS 305 D K H JONES

COURSES FOR GRADUATES

MKTG 416 MERCHANDISING POLICIES AND PROBLEMS.
PREREQUISITE--MKTG. 101 OR EQUIVALENT. CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 8-10 TU TH 420 D K H JONES

MKTG 481 ADVANCED ADVERTISING PRINCIPLES.
SAME AS ADV. AND COMM. 481.
*GRADUATE CREDIT IS NOT GIVEN FOR BOTH MKTG. 388 AND MKTG. 481.
#1 UNIT
LECT-DISC 10-12 M W 123 G H MOYER

MKTG 493 RESEARCH IN SPECIAL FIELDS.
1/4 TO 2 UNITS
CONF ARR SCOTTON

MKTG 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
*CLASS MEETS ON ALTERNATE MONDAYS.
DISC ARR JONES

DEPARTMENT OFFICE 273 A H

MAJOR IN MATHEMATICS

MAJOR--TWENTY HOURS IN MATHEMATICS, EXCLUDING COURSES WITH NUMBERS LESS THAN 130, AND INCLUDING TWO COURSES CHOSEN FROM MATH. 317, 318, 327, 328, 332, 333, 347, 348, 353, 354.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ACCOUNTANCY, ASTRONOMY, CHEMISTRY, ECONOMICS, FINANCE, PHILOSOPHY, PHYSICS, PSYCHOLOGY, STATISTICS--MATH. 161, 361, 362, 363, 364, 375, SURVEYING, THEORETIC AND APPLIED MECHANICS.
DEPARTMENTAL HONORS. ENTERING STUDENTS WITH SUPERIOR MATHEMATICAL ABILITY SHOULD APPLY TO THE DEPARTMENT OF MATHEMATICS, 273 ALTGELD HALL, FOR INFORMATION REGARDING THE HONORS COURSE, MATH. 149. INFORMATION REGARDING REQUIREMENTS FOR GRADUATION WITH DISTINCTION IN MATHEMATICS IS AVAILABLE FROM DR. J. W. PETERS, 269 ALTGELD HALL.

NOTE--AN ENTERING STUDENT WITH AN ADEQUATE PREPARATION IN HIGH SCHOOL MATHEMATICS SHOULD ENROLL IN ANALYTIC GEOMETRY, MATH. 122 OR 123, DURING THE FIRST SEMESTER, AND IN THE CALCULUS, MATH. 132 OR 133, DURING THE SECOND SEMESTER OF HIS FRESHMAN YEAR. ADMISSION TO ANALYTIC GEOMETRY NORMALLY REQUIRES A PASSING GRADE ON THE MATHEMATICS PLACEMENT TEST. A STUDENT INELIGIBLE FOR ANALYTIC GEOMETRY SHOULD ENROLL IN ALGEBRA, MATH. 111 OR 112, AND TRIGONOMETRY, MATH. 114, DURING HIS FIRST SEMESTER.

UNDERGRADUATE STUDENTS INTENDING TO TAKE ADVANCED WORK OR A MAJOR IN MATHEMATICS SHOULD COMPLETE THE SECOND SEMESTER OF THE CALCULUS, MATH. 142 OR 143, AS EARLY AS POSSIBLE. OF THE VARIOUS COURSES OFFERED AT THE 300 LEVEL, THE INTRODUCTORY COURSES IN ALGEBRA, 317, 318, IN GEOMETRY, 327, 328, IN TOPOLOGY, 332, 333, AND IN ANALYSIS, 347, 348 ARE BASIC FOR MORE ADVANCED WORK IN MATHEMATICS. MANY OF THE OTHER 300 LEVEL COURSES ARE DESIGNED TO SERVE STUDENTS WHO ANTICIPATE A RELATIVELY EARLY TERMINATION OF THEIR COURSE WORK IN MATHEMATICS. THESE STUDENTS MIGHT PREFER THE COURSES THAT RELATE INTERMEDIATE MATHEMATICS TO THEIR SPECIALIZED AREAS OF INTEREST. STUDENTS PREPARING TO TEACH HIGH SCHOOL OR COLLEGE MATHEMATICS, OR THOSE INTERESTED IN MATHEMATICS AS A CAREER SHOULD CONSULT WITH DR. J. W. PETERS, 269 ALTGELD HALL, CONCERNING THEIR PROGRAM AT THE EARLIEST POSSIBLE MOMENT AFTER ENTERING THE UNIVERSITY.

MAJOR IN STATISTICS

MAJOR--TWELVE HOURS BEYOND CALCULUS INCLUDING MATH. 315, 347, 363, AND THREE OTHER HOURS OF 300 COURSES IN STATISTICS IN THE DEPARTMENT OF MATHEMATICS.

MINORS--TWENTY HOURS IN ONE SUBJECT APPROVED BY THE DEPARTMENT OF MATHEMATICS. OF THESE TWENTY HOURS NOT MORE THAN NINE MAY BE IN STATISTICAL METHODS, AND MATH. 161 MAY BE TAKEN AS THREE OF THESE HOURS. THE COURSES NOT EMPHASIZING STATISTICAL METHODS SHOULD BE CHOSEN SO THAT COURSES ON THE 400 LEVEL CAN BE TAKEN IF THE STUDENT ENTERS GRADUATE COLLEGE.

MAJOR IN ACTUARIAL SCIENCE

MAJOR--ONE YEAR OF CALCULUS AND AT LEAST FIVE COURSES CHOSEN FROM THE FOLLOWING--MATH. 295, 311, 312, 362, 363, 371, 372,

MINORS--TWENTY HOURS CHOSEN FROM THE FOLLOWING--FIN. 259, 260, 262, 263, 360, 363, 366, 367,

NOTE--STUDENTS ARE URGED TO ELECT ACCY. 201 AND B. LAW 261 IN THEIR JUNIOR YEAR.

COURSES FOR UNDERGRADUATES

MATH 111 ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA. 1 UNIT. PLANE GEOMETRY. 1 UNIT.
STUDENTS HAVING 1-1/2 OR MORE UNITS OF HIGH SCHOOL ALGEBRA MAY NOT TAKE THIS COURSE UNLESS THEY HAVE THE APPROVAL OF THEIR COLLEGE OFFICE
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT-DISC	B1	9-11	MTUWTHF	102	A	H

MATH 112 COLLEGE ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA. 1-1/2 UNITS. PLANE GEOMETRY. 1 UNIT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	C1	10	MTUWTHFS	108	A	H

MATH 114 PLANE TRIGONOMETRY.
PREREQUISITE--ENTRANCE ALGEBRA. 1-1/2 UNITS. OR REGISTRATION IN MATH 111. PLANE GEOMETRY. 1 UNIT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

LECT-DISC	A1	8	TUWTHF	108	A	H
LECT-DISC	D1	11	TUWTHF	108	A	H

MATH 123 ANALYTIC GEOMETRY.
PREREQUISITE--MATH. 111 OR 112. AND 114.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT-DISC	A1	8-10	MTUWTHF	110	A	H
LECT-DISC	C1	10-12	MTUWTHF	110	A	H

MATH 133 CALCULUS. I.
PREREQUISITE--MATH. 122 OR 123.
3 HOURS

LECT-DISC	B1	9	MTUWTHFS	108	A	H
LECT-DISC	B2	9	MTUWTHFS	247	A	H

MATH 142 CALCULUS. II.
PREREQUISITE--MATH. 132.
3 HOURS

LECT-DISC	A1	8	MTUWTHFS	102	A	H
LECT-DISC	B1	9	MTUWTHFS	147	A	H

MATH 143 CALCULUS. II.
PREREQUISITE--MATH. 133.
5 HOURS

LECT-DISC	A1	8-10	MTUWTHF	145	A	H

MATH 195 INTRODUCTION TO AUTOMATIC DIGITAL COMPUTING.
PREREQUISITE--SOPHOMORE STANDING AND ONE YEAR OF COLLEGE MATHMATICS. INCLUDING DIFFERENTIAL CALCULUS.
3 HOURS

LECT-DISC	E1	1-3	M W F	202	H	H	S R RAY

COURSES FOR ADVANCED UNDERGRADUATES

MATH 202 MATHEMATICS FOR ELEMENTARY TEACHERS. I.
PREREQUISITE--JUNIOR STANDING IN ELEMENTARY EDUCATION.
5 HOURS

LECT-DISC	C1	10-12	MTUWTHF	202	H	H	BARTRAM

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MATH 300 THE THEORY OF SETS AND THE REAL NUMBER SYSTEM.
PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1 UNIT

LECT-DISC	C1	10	MTUWTHF	145	A	H
	C1	3	TU	145	A	H

```
MATH  301     FUNDAMENTAL CONCEPTS OF ALGEBRA.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS. OR 1 UNIT
               LECT-DISC  A1     8          MTUWTHF   147  A H
                          A1     3           TU       147  A H

MATH  312     ADVANCED ALGEBRA.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS. OR 1 UNIT
               LECT-DISC  B1     9          MTUWTHF   155  A H
                          B1     3              W     155  A H

MATH  315     LINEAR TRANSFORMATIONS AND MATRICES.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS. OR 1 UNIT
               LECT-DISC  B1     9          MTUWTHFS  165  A H
               LECT-DISC  D1    11          MTUWTHFS  165  A H

MATH  317     INTRODUCTION TO HIGHER ALGEBRA. I.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS. OR 1 UNIT
               LECT-DISC  B1     9          MTUWTHF   159  A H
                          B1     3              W     159  A H

MATH  318     INTRODUCTION TO HIGHER ALGEBRA. II.
         PREREQUISITE--MATH. 317.
         3 HOURS. OR 1 UNIT
               LECT-DISC  B1     9          MTUWTHF   169  A H
                          B1     3              W     169  A H

MATH  332     TOPOLOGICAL SPACES.
         PREREQUISITE--CREDIT OR REGISTRATION IN MATH 347.
         3 HOURS. OR 1 UNIT
               LECT-DISC  D1    11          MTUWTHF   102  A H
                          D1     3          M         102  A H

MATH  343     ADVANCED CALCULUS.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS. OR 1 UNIT
               LECT-DISC  A1     8          MTUWTHFS  173  A H
               LECT-DISC  B1     9          MTUWTHFS  173  A H
               LECT-DISC  C1    10          MTUWTHFS  173  A H
               LECT-DISC  D1    11          MTUWTHFS  173  A H

MATH  345     DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         *CREDIT IS NOT GIVEN FOR BOTH MATH. 345 AND MATH. 349.
         *3 HOURS. OR 1 UNIT
               LECT-DISC  A1     8          MTUWTHFS  159  A H
               LECT-DISC  B1     9          MTUWTHFS  245  A H
               LECT-DISC  C1    10          MTUWTHFS  159  A H
               LECT-DISC  D1    11          MTUWTHFS  159  A H

MATH  346     COMPLEX VARIABLES AND APPLICATIONS.
         PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
         *CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND MATH. 348.
         *3 HOURS. OR 1 UNIT
               LECT-DISC  A1     8          MTUWTHFS  155  A H
               LECT-DISC  D1    11          MTUWTHFS  155  A H

MATH  347     INTRODUCTION TO HIGHER ANALYSIS. REAL VARIABLES.
         PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
         3 HOURS. OR 1 UNIT
               LECT-DISC  C1    10          MTUWTHF   147  A H
                          C1     3              TH    147  A H

MATH  363     ADVANCED STATISTICS. I.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS. OR 1 UNIT
               LECT-DISC  B1     9          MTUWTHF   243  A H
                          B1     3              W     243  A H
```

MATH 387 INTRODUCTION TO NUMERICAL ANALYSIS.
PREREQUISITE--SENIOR STANDING, CALCULUS, AND A COURSE IN DIFFERENTIAL EQUATIONS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

LECT-DISC	A1	8	MTUWTHF	165	A H	
	A1	3	TU	165	A H	

COURSES FOR GRADUATES

MATH 401 SECOND COURSE IN ABSTRACT ALGEBRA, I.
PREREQUISITE--MATH. 317 AND 318.
1 UNIT

LECT-DISC	B1	9	MTUWTHF	241	A H	

MATH 404 GROUP THEORY.
PREREQUISITE--MATH. 317 AND 318, OR EQUIVALENT.
1 UNIT

LECT-DISC	C1	10	MTUWTHF	155	A H	

MATH 441 FUNCTIONS OF REAL VARIABLES.
PREREQUISITE--MATH. 347.
1 UNIT

LECT-DISC	D1	11	MTUWTHF	145	A H	

MATH 442 MEASURE AND INTEGRATION.
PREREQUISITE--MATH. 347, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	E1	1	MTUWTHF	102	A H	

MATH 490 READING COURSE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS

DISC		ARR				

MATH 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

DISC		ARR				

MECHANICAL ENGINEERING

DEPARTMENT OFFICE 144 M E B

COURSES FOR ADVANCED UNDERGRADUATES

M E 224 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 221, OR M E 222, T A M 221, CREDIT OR REGISTRATION IN T A M 223.
3 HOURS

LECT-DISC	P	10-12	MTUWTHFS	336	M E B		BAYNE

M E 234 HEAT TREATMENT OF METALS.
PREREQUISITE--T A M 221, CREDIT OR REGISTRATION IN M E 224 AND T A M 223.
3 HOURS

LECT-DISC	P	1	MTUWTH	110	M E B		SINGER
LAB	P	2-5	TU TH	110	M E B		
	P	2-5	TU TH	114	M E B		

M E 263 APPLICATION OF ENERGY CONCEPTS TO POWER PROCESSES.
PREREQUISITE--M.E. 206 AND 212.
5 HOURS

LECT-DISC	P	7	MTUWTHFS	204	M E L		HEBRANK
LAB	P	8-10	MTUWTH	204	M E L		
	P	8-10	MTUWTH	101	M E B		
	P	8-10	MTUWTH	M E LAB			

M E 264 HEAT POWER LABORATORY.
PREREQUISITE--M E 212 AND 263.
3 HOURS

LAB	P	8-10	MTUWTHFS	204	M E L	BAIR
	P	8-10	MTUWTHFS	101	M E B	
	P	8-10	MTUWTHFS	M E LAB		

M E 271 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 224.
3 HOURS

LECT-DISC	P	10-12	MTUWTHFS	343	M E B	RADZIMOVSKY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

M E 305 THERMODYNAMICS OF HIGH VELOCITY FLOW.
PREREQUISITE--M. E. 206 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 OR 1 UNIT

LECT-DISC	P	ARR		136	M E B	CHOW

M E 341 ENGINEERING ANALYSIS AND DESIGN.
PREREQUISITE--M E 271. SENIOR STANDING. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 3/4 OR 1 UNIT
THIS COURSE FOR THE SUMMER OF 1963 WILL BE OFFERED ONLY TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA.

LECT-DISC	P	10-12	MTUWTHF	349	M E B	BROGHAMER

COURSES FOR GRADUATES

M E 438 LABORATORY INVESTIGATIONS IN POWER MACHINERY.
PREREQUISITE--ONE-YEAR COURSE IN POWER LABORATORY.
1/2 TO 1 1/2 UNITS

CONF	ARR		HULL

M E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR		STAFF

METALLURGICAL ENGINEERING

DEPARTMENT OFFICE 311 CER

COURSES FOR GRADUATES

MET E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR		STAFF

MICROBIOLOGY

DEPARTMENT OFFICE 127 BURRILL HALL

MAJOR--TWENTY HOURS OF MICROBIOLOGY. EXCLUSIVE OF MCBIO. 100 AND 101 D.S. 350 MAY BE SELECTED AS PART OF THE MAJOR.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS. WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY. CHEMISTRY. ENTOMOLOGY. MATHEMATICS. PHYSICS. PHYSIOLOGY. AND ZOOLOGY.

COURSES FOR UNDERGRADUATES

MCBIO 100 INTRODUCTORY MICROBIOLOGY.
3 HOURS

LECT	8	MTUWTHF	124	BUR HALL	DEPINTO

MCBIO 101 INTRODUCTORY EXPERIMENTAL MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 100.
2 HOURS

LAB	9-12	M W	242	BUR HALL	DEPINTO AND
	9-11	F	242	BUR HALL	ASSISTANTS

COURSES FOR ADVANCED UNDERGRADUATES

MCBIO 207 RESEARCH AND SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING. TWENTY HOURS OF MICROBIOLOGY. CONSENT OF INSTRUCTOR.
3 TO 5 HOURS

LAB	ARR			BUR HALL	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MCBIO 326 PATHOGENIC BACTERIOLOGY.
PREREQUISITE--MCBIO. 101 OR 201 OR 309.
5 HOURS. OR 1 UNIT

LECT	8	MTUWTHF	136	BUR HALL	MCCAMISH
LAB	9-12	M W F	202	BUR HALL	MCCAMISH AND HELM

COURSES FOR GRADUATES

MCBIO 490 INDIVIDUAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR
1/2 TO 2 UNITS

LAB	ARR			BUR HALL	STAFF

MCBIO 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

LAB	ARR			BUR HALL	STAFF

MINING ENGINEERING

DEPARTMENT OFFICE 311 CER

COURSES FOR GRADUATES

MIN E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR				STAFF

DEPARTMENT OFFICE 100 S M H

COURSES FOR UNDERGRADUATES

MUSIC 106 COMPOSITION.
PREREQUISITE--QUALIFYING EXAMINATION IN COMPOSITION. TO BE ADMINISTERED BY THE THEORY-COMPOSITION FACULTY.
2 HOURS. SUMMER--2. 3. OR 4 HOURS
STUDENTS DESIRING TO SATISFY FRESHMAN OR SOPHOMORE THEORY REQUIREMENTS MAY TAKE THIS COURSE.
*TWO ADDITIONAL HOURS TO BE ARRANGED.

LECT-DISC	A	*9	MTUWTHF	103	S M H	KADERAVEK
LECT-DISC	B	*10	MTUWTHF	106	S M H	CARTER
LECT-DISC	C	ARR		200	T A	A THOMAS. KELLY

MUSIC 113 APPRECIATION OF MUSIC. SYMPHONIC.
FOR NON-MUSIC STUDENTS.
PREREQUISITE--SOPHOMORE STANDING.
2 HOURS

LECT-DISC	A	10	MTUWTH	25	S M H	

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 234 WORKSHOP IN ELEMENTARY MUSIC EDUCATION.
STUDENTS ENROLLING IN THIS COURSE DURING THE SUMMER SESSION MAY NOT ENROLL IN ANY OTHER COURSE.
PREREQUISITE--CONSENT OF INSTRUCTOR AND PUBLIC SCHOOL TEACHING EXPERIENCE.
2 HOURS
MEETS FIRST TWO WEEKS ONLY.

LECT-DISC	A	9-12	MTUWTHF	100	S H	R THOMAS
	A	1-4	MTUWTHF	100	S H	R THOMAS

MUSIC 241 MUSIC FOR ELEMENTARY TEACHERS. II.
PREREQUISITE--MUSIC 240.
3 HOURS

LECT-DISC	A	10	TUWTHF	1203	W NEV RM104	PFLEDERER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 304 ANALYTICAL TECHNIQUES. I.
PREREQUISITE--MUSIC 104 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 UNIT

LECT-DISC	A	9	TUWTHF	106	S M H	A THOMAS

MUSIC 306 COMPOSITION.
PREREQUISITE--MUSIC 104 OR 106 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS. OR 1/2 OR 1 UNIT

CONF	A	ARR				COMPOSITION FACULTY

MUSIC 312 MUSIC OF THE BAROQUE AND CLASSICAL PERIODS.
PREREQUISITE--MUSIC 214 OR 311.
3 HOURS. OR 1/2 UNIT

LECT		1	TUWTHF	1203	W NEV RM104	PLAMENAC
QUIZ	A	7MM	M W	1203	W NEV RM104	

MUSIC 315 CONTEMPORARY MUSIC.
PREREQUISITE--JUNIOR STANDING AND/OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT

LECT		2	TUWTHF	1203	W NEV RM104	MACDONALD
QUIZ	A	7PM	TU TH	1203	W NEV RM104	

MUSIC 330 APPLIED MUSIC PEDAGOGY.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 HOURS. OR 1 UNIT
*2 HOURS. OR 1/2 UNIT
SECTION A-PIANO. SECTION B-STRINGS. SECTION C-VOICE.

LECT-DISC	A	9	TUWTHF	200A	S M H		LYKE
LECT-DISC	B	ARR		202	S A		ROLLAND
LECT-DISC	C	ARR		210	S H		MILLER. G WILSON

MUSIC 333 CHURCH MUSIC TECHNIQUES.
PREREQUISITE--MUSIC 332 OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	2	TUWTHF	201	H A		PETTINGA

MUSIC 340 INSTRUMENTAL CLINIC AND BAND PAGEANTRY.
PREREQUISITE--ADVANCED UNDERGRADUATE OR GRADUATE WITH MAJOR WORK OR EXPERIENCE IN BAND OR ORCHESTRA.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	1	TUWTHF	228	BAND		KISINGER

MUSIC 342 PERCUSSION METHODS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION. AND MUSIC 174 AND 257 OR EQUIVALENT.
3 HOURS. OR 1/2 UNIT

LECT-DISC	A	8	MTUWTHF	6	S M H		FINK

MUSIC 344 METHODS OF STRING CLASS TEACHING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

LECT-DISC	A	*9	TUWTHF	5	S M H		WALLER

MUSIC 347 TEACHING OF WOODWIND INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	11	S M H		MCDOWELL. EDLEFSEN

COURSES FOR GRADUATES

MUSIC 400 ADVANCED INSTRUMENTATION-CHAMBER AND SYMPHONIC.
PREREQUISITE--UNDERGRADUATE INSTRUMENTATION.
1/2 OR 1 UNIT

LECT-DISC	A	ARR		200	T A		KELLY

MUSIC 402 ANALYSIS IN RELATION TO PERFORMANCE AND INTERPRETATION. I.
PREREQUISITE--MUSIC 104 OR EQUIVALENT. CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	9-11	TUWTHF	1203	W NEV RM116		LEONHARD

MUSIC 406 COMPOSITION.
1/2 TO 1 1/2 UNITS

CONF	A	ARR					COMPOSITION FACULTY

MUSIC 419 THE HISTORY OF OPERA FROM MOZART TO THE PRESENT.
PREREQUISITE--MUSIC 312 AND 313 OR CONSENT OF INSTRUCTOR.
1/2 UNIT

LECT-DISC	A	3	TUWTHF	101	H A		PLAMENAC

MUSIC 430 ADVANCED ORCHESTRA CONDUCTING AND LITERATURE.
PREREQUISITE--PREVIOUS CONDUCTING EXPERIENCE.
1 UNIT

LECT-DISC	A	1	TUWTHF	1203	W NEV RM116		BERGETHON

MUSIC 431 ADVANCED BAND CONDUCTING AND LITERATURE.
PREREQUISITE--BACHELORS DEGREE WITH MAJOR WORK OR EXPERIENCE IN BAND AND/OR ORCHESTRA. CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	3-5	TU TH	265	BAND	HINDSLEY

MUSIC 433 ADVANCED CHORAL LITERATURE AND CONDUCTING.
PREREQUISITE--GRADUATE STANDING IN MUSIC. MUSIC 432 OR EQUIVALENT. OR CONSENT OF INSTRUCTOR.
1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED.

LECT-DISC	*A	11-1	TUWTHF	25	S M H	DECKER

MUSIC 438 WIND INSTRUMENT LITERATURE.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT
*SECTION A--WOODWIND.

LECT-DISC	*A	2	TUWTHF	2	S M H	EDLEFSEN

MUSIC 441 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION. II.
1/2 OR 1 UNIT

LECT-DISC	A	8	TUWTHF	1203	W NEV RM104	LEONHARD

MUSIC 444 THE GENERAL MUSIC PROGRAM IN ELEMENTARY SCHOOLS.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION.
1/2 UNIT

LECT-DISC	A	8	TUWTHF	1203	W NEV RM116	R THOMAS

APPLIED MUSIC

NOTE--STUDENTS IN MUSIC CURRICULA RECEIVE THREE OR FOUR HOURS FOR THEIR MAJOR OR PRINCIPAL SUBJECT.

AS A PART OF THE REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE. SENIOR STUDENTS MUST PRESENT A PUBLIC RECITAL WHICH MEETS WITH SCHOOL OF MUSIC FACULTY APPROVAL AND CONFORMS WITH DEPARTMENTAL REQUIREMENTS.

MUSIC STUDENTS RECEIVE TWO HOURS CREDIT FOR THEIR MINOR OR SECONDARY SUBJECT.

STUDENTS FROM OTHER COLLEGES RECEIVE TWO HOURS CREDIT FOR WORK IN APPLIED MUSIC IF IN ACCORDANCE WITH THE REGULATIONS OF THEIR COLLEGE PASSING OF A PERFORMING EXAMINATION IS REQUIRED AS A PREREQUISITE TO THE INITIAL REGISTRATION IN ANY APPLIED MUSIC COURSE.

COURSES FOR UNDERGRADUATES

MUSIC 180 PIANO.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS

CONF	ARR	HENDERSON. KARP

MUSIC 181 VOICE.
2 OR 3 HOURS. SUMMER--1 OR 2 HOURS

CONF	ARR	FOOTE. KELLOGG. MILLER. G WILSON

MUSIC 182 ORGAN.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS.

CONF	ARR	PETTINGA

MUSIC 183 VIOLIN.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR ROLLAND

MUSIC 184 VIOLA.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR ROLLAND

MUSIC 185 CELLO.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR SWENSON

MUSIC 186 STRING BASS.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR KROLICK

MUSIC 187 FLUTE.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR EDLEFSEN

MUSIC 188 CLARINET.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR MCDOWELL

MUSIC 189 OBOE.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR EDLEFSEN

MUSIC 190 BASSOON.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR BERRY

MUSIC 191 CORNET AND TRUMPET.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR SEXTON

MUSIC 192 FRENCH HORN.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR HOLDEN

MUSIC 193 TROMBONE.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR GRAY

MUSIC 194 BARITONE.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR GRAY

MUSIC 195 TUBA.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR GRAY

MUSIC 196 PERCUSSION.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR FINK

MUSIC 198 ALTO SAXOPHONE.
2 OR 4 HOURS. SUMMER--1 OR 2 HOURS
CONF ARR MCDOWELL

APPLIED MUSIC COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PREREQUISITE--FOR STUDENTS IN THE BACHELOR OF MUSIC CURRICULUM, JUNIOR STANDING IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN MUSIC EDUCATION, COMPLETION OF THE CURRICULAR REQUIREMENT IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN OTHER COLLEGES OF THE UNIVERSITY, COMPLETION OF FOUR SEMESTERS IN THE COMPARABLE APPLIED MUSIC COURSE AT THE 100 LEVEL.

MUSIC 380 PIANO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR HENDERSON, KARP

MUSIC 381 VOICE.
2 OR 3 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR FOOTE, KELLOGG, MILLER, G WILSON

MUSIC 382 ORGAN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR PETTINGA

MUSIC 383 VIOLIN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR ROLLAND

MUSIC 384 VIOLA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR ROLLAND

MUSIC 385 CELLO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR SWENSON

MUSIC 386 STRING BASS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR KROLICK

MUSIC 387 FLUTE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR EDLEFSEN

MUSIC 388 CLARINET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR MCDOWELL

MUSIC 389 OBOE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR EDLEFSEN

MUSIC 390 BASSOON.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR BERRY

MUSIC 391 CORNET AND TRUMPET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR SEXTON

MUSIC 392 FRENCH HORN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR HOLDEN

MUSIC 393 TROMBONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF ARR GRAY

MUSIC 394 BARITONE.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR GRAY

MUSIC 395 TUBA.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR GRAY

MUSIC 396 PERCUSSION.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR FINK

MUSIC 398 SAXOPHONE.
2 OR 4 HOURS. 1/2 OR 1 UNIT. SUMMER--1 OR 2 HOURS. 1/4 OR 1/2 UNIT.
CONF ARR MCDOWELL

APPLIED MUSIC COURSES FOR GRADUATES

MUSIC 480 PIANO.
PREREQUISITE--BACHELOR OF MUSIC DEGREE. SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF ARR GRADUATE APPLIED MUSIC FACULTY

MUSIC 481 VOICE.
PREREQUISITE--BACHELOR OF MUSIC DEGREE. SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF ARR GRADUATE APPLIED MUSIC FACULTY

MUSIC 482 ORGAN.
PREREQUISITE--BACHELOR OF MUSIC DEGREE. SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF ARR GRADUATE APPLIED MUSIC FACULTY

MUSIC 483 STRING INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE. SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF ARR GRADUATE APPLIED MUSIC FACULTY

MUSIC 484 WIND INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE. SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF ARR GRADUATE APPLIED MUSIC FACULTY

MUSIC 489 DOCTORAL PROJECTS.
OPEN ONLY TO STUDENTS IN THE DOCTOR OF MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 3 UNITS.
CONF A ARR GRADUATE APPLIED MUSIC FACULTY

MUSIC 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF ADVISOR.
0 TO 4 UNITS. SUMMER--0 TO 2 UNITS
CONF A ARR GRADUATE FACULTY

SUPPLEMENTARY INSTRUMENTS

NOTE--THESE COURSES ARE OPEN AS ELECTIVES TO STUDENTS FROM OTHER COLLEGES. IN COURSES INVOLVING TWO INSTRUMENTS, TWO DAYS A WEEK ARE SPENT ON EACH INSTRUMENT FOR THE ENTIRE SEMESTER. PREREQUISITE FOR ALL NON-MUSIC STUDENTS--CONSENT OF INSTRUCTOR.

COURSES FOR UNDERGRADUATES

MUSIC 170 STRING INSTRUMENTS.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
2 HOURS
*SECTION A IS FOR BEGINNERS.

	LAB-DISC	A	8	MTUWTHF	5	S M H		KROLICK, WALLER

MUSIC 177 CLASS PIANO INSTRUCTION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

4TH SEM	LAB-DISC	A	8	TUWTHF	200A	S M H		LYKE
1ST SEM	LAB-DISC	B	8	TUWTHF	1	S H		HENDERSON

COURSES FOR ADVANCED UNDERGRADUATES

ENSEMBLE COURSES

MUSIC 250 UNIVERSITY ORCHESTRA.
1/2 HOUR

	PRACT	A	730-930PM	TU	RECITAL HALL			BERGETHON

MUSIC 261 UNIVERSITY CHORUS.
1/2 HOUR

	PRACT	A	12	TUWTHF	25	S M H		DECKER

MUSIC 265 OPERA WORKSHOP AND ENSEMBLE.
1/2 HOUR

	PRACT	A	4-6	TU TH	25	S M H		ZIRNER AND STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 350 ADVANCED ENSEMBLE MUSIC.
PREREQUISITE--REGISTRATION IN APPLIED MUSIC AT THE 300 LEVEL AND CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 UNIT
*SECTION A IS FOR INSTRUMENTAL.

	PRACT	A	ARR		102	S A		SWENSON
	PRACT	B	4-6	W	25	S M H		ZIRNER

MUSIC LITERATURE COURSES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 320 PROSEMINAR.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION. CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 8 HOURS OR 2 UNITS.
*2 OR 4 HOURS. OR 1/2 OR 1 UNIT

CONF	A	ARR			GRADUATE FACULTY IN MUSIC HISTORY, MUSIC THEORY, AND MUSIC EDUCATION

MUSIC 323 OPERA PRODUCTION. I.
PREREQUISITE--MUSIC 265, 381, AND CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 UNIT

CONF	A	ARR	100A S H	ZIRNER

COURSES FOR GRADUATES

MUSIC 420 SEMINAR IN MUSIC LITERATURE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

LECT-DISC	A	3-5	TU F	1203 W NEV RM116	GOLDTHWAITE

MUSIC 426 BEETHOVEN. I.
1/2 OR 1 UNIT

LECT-DISC	A	10	TUWTHF	101 H A	MACDONALD

NUCLEAR ENGINEERING

DEPARTMENT OFFICE 264 M E B

COURSES FOR GRADUATES

NUC E 451 REACTOR LABORATORY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

LAB		ARR	NUC REACTOR LAB	HANG, WYMAN

NUC E 454 NUCLEAR ENGINEERING LABORATORY INVESTIGATIONS.
PREREQUISITE--PHYCS. 282 OR 382 AND CONSENT OF INSTRUCTOR.
1/2 TO 1 1/2 UNITS

CONF		ARR	STAFF

NUC E 490 SPECIAL TOPICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
A-DIRECT CONVERSION OF NUCLEAR ENERGY

LAB-DISC		ARR	MILEY

NUC E 495 NUCLEAR ENGINEERING PROBLEMS.
PREREQUISITE--AT LEAST THREE UNITS OF GRADUATE WORK AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

CONF		ARR	WYMAN

NUC E 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF		ARR	STAFF

PHILOSOPHY

DEPARTMENT OFFICE 121 L H

MAJOR--TWENTY HOURS FROM ANY COURSES OFFERED BY THE DEPARTMENT, INCLUDING PHIL. 102, 303, 306, 321, AND ONE ADDITIONAL 300 COURSE IN PHILOSOPHY.

MINORS--TWENTY HOURS SELECTED FROM THE COURSES OF ANY ONE OR TWO DEPARTMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES EXCLUDING RHET. 101, 102, AND FIRST-YEAR MODERN LANGUAGE COURSES, OR FROM ANY APPROVED L.A.S. INTERDEPARTMENTAL CURRICULUM, OR FROM ECONOMICS, EDUCATION, HOME ECONOMICS, LAW, OR LIBRARY SCIENCE. IF TWO DEPARTMENTS OR CURRICULA ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH, AND THE COURSES MUST BE APPROVED BY THE DEPARTMENT OF PHILOSOPHY.

COURSES FOR UNDERGRADUATES

FRESHMAN JAMES SCHOLARS ARE AUTOMATICALLY PERMITTED TO TAKE ANY 100 PHILOSOPHY COURSE.

PHIL 101 INTRODUCTION TO PHILOSOPHY.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

LECT-DISC	B	9-1030	MTUWTH	117 L H
LECT-DISC	C	10-1130	MTUWTH	139 L H

PHIL 102 LOGIC.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

LECT-DISC	C	1030-12	MTUWTH	117 L H
LECT-DISC	F	2-4	M W F	139 L H

PHIL 105 MORAL IDEAS AND PRACTICE.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
*CREDIT IS NOT GIVEN FOR BOTH PHIL. 105 AND 103.
*2 HOURS

LECT-DISC	I	MTUWTH	139 L H

COURSES FOR ADVANCED UNDERGRADUATES

PHIL 201 READING COURSE.
PREREQUISITE--JUNIOR OR SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

CONF	ARR

PHIL 202 THESIS.
PREREQUISITE--SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

CONF	ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOPHOMORE JAMES SCHOLARS WHO HAVE HAD NO PHILOSOPHY COURSES ARE PERMITTED TO TAKE PHILOSOPHY 303, 306, 307, AND 308. THOSE WHO HAVE HAD A PHILOSOPHY COURSE MAY TAKE ANY 300 PHILOSOPHY COURSE.

PHIL 307 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY ARE THE EQUIVALENT OF PHIL. 306
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT
LECT-DISC 1 M W F 117 L H

PHIL 308 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY ARE THE EQUIVALENT OF PHIL. 306
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT
LECT-DISC 2 M W F 117 L H

PHIL 311 PHILOSOPHIC IDEAS OF THE NINETEENTH AND TWENTIETH CENTURIES.
3 HOURS. OR 3/4 OR 1 UNIT
LECT-DISC 830-10 MTUWTH 139 L H

PHIL 328 PHILOSOPHY OF SCIENCE.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS. OR 3/4 OR 1 UNIT
LECT-DISC 10-12 M W F 106 L H

PHIL 335 SOCIAL PHILOSOPHY.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS. OR 3/4 OR 1 UNIT
LECT-DISC 11-1230 MTU THF 110 L H

COURSES FOR GRADUATES

PHIL 483 INDIVIDUAL TOPICS.
1/2 OR 1 UNIT. SUMMER--1/2 TO 2 UNITS
CONF ARR

PHIL 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR GOTSHALK

PHYSICAL EDUCATION FOR MEN

MEN ENTERING THE UNIVERSITY WITH LESS THAN SIXTY SEMESTER HOURS OF CREDIT--EXCEPT VETERANS WHO RECEIVE CREDIT BECAUSE OF MILITARY SERVICE. BUT WHO MAY ELECT TO TAKE PHYSICAL EDUCATION--ARE REQUIRED TO OBTAIN CREDIT FOR FOUR SEMESTERS OF PHYSICAL EDUCATION. INCLUDING THE AMOUNT TRANSFERRED. CREDIT MAY BE OBTAINED BY PASSING COURSES LISTED BELOW OR BY PASSING PROFICIENCY EXAMINATIONS WHICH ARE OFFERED AT TIMES SPECIFIED BY THE DEPARTMENT. PERMITS FOR TAKING PROFICIENCY EXAMINATIONS MUST BE SECURED IN ROOM 201 MENS OLD GYMNASIUM NOT LATER THAN 48 HOURS PRECEDING EACH EXAMINATION. STUDENTS ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS IN COURSES IN WHICH THEY ARE CURRENTLY REGISTERED. STUDENTS ENROLLED IN PRESCRIBED EXERCISE ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS WITHOUT SPECIAL WRITTEN PERMISSION FROM THE COORDINATOR OF PRESCRIBED EXERCISE.

OFFICE FOR BASIC INSTRUCTION COURSES--201 MENS OLD GYMNASIUM.

OFFICE FOR PROFESSIONAL COURSES--121 HUFF GYMNASIUM.

BASIC-INSTRUCTION COURSES FOR UNDERGRADUATES

P E M 120 PERSONAL DEFENSE ACTIVITIES.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 3-5 M W 115 MOG ANNEX HOTTINGER

P E M 135 TENNIS.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 3-5 TU TH GREGORY CTS SHERMAN
NOTE--FIRST CLASS MEETING WILL BE HELD IN NORTH BALCONY, HUFF GYM.

P E M 137 BOWLING.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 3-5 M W 40 IU ALLEYS LEIGH

P E M 138 GOLF.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 10-12 TU TH H G FIELD C KELLER
NOTE--FIRST CLASS MEETING WILL BE HELD IN WEST BALCONY, HUFF GYM.

P E M 140 CANOEING AND SMALL CRAFT OPERATION.
PREREQUISITE--ABILITY TO SWIM REASONABLY WELL 25 YARDS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 3-5 TU TH 202 M O G BECHTEL

P E M 142 BALLROOM DANCE.
SAME AS P.E.W. 142.
1 HOUR
LAB L 7-9PM MTU 310 W GYM DASCH
L 7PM W 310 W GYM

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E M 213 ADVANCED FOOTBALL.
PREREQUISITE--P.E.M. 152.
1 HOUR
LAST FOUR WEEKS OF SUMMER SESSION.
LECT-DISC 7 MTUWTH 207 H G STAUBER

P E M 214 ADVANCED BASKETBALL.
PREREQUISITE--P.E.M. 151.
1 HOUR
FIRST FOUR WEEKS OF SUMMER SESSION.
LECT-DISC 7 MTUWTH 207 H G BRAUN

P E M 217 THEORY OF COACHING.
PREREQUISITE--P.E.M. 213 AND P.E.M. 214, OR CONSENT OF INSTRUCTOR.
2 HOURS
LECT-DISC 8 MTUWTH 84C H G FLETCHER

PHYSICAL EDUCATION

DEPARTMENT OFFICE 121 HUFF GYM

COURSES FOR GRADUATES

P E 401 PROBLEMS IN PHYSICAL EDUCATION.
1 UNIT
LECT-DISC 8 MTUWTH 207A H G COOPER

P E 406 PHILOSOPHY OF SPORT.
1 UNIT
LECT-DISC 10 MTUWTH 202 MOG KENNEY

P E 407 SPORT PSYCHOLOGY.
PREREQUISITE--PSYCH. 100, ED. 211, CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC 9 MTUWTH 301 H G HUBBARD

P E 408 PRINCIPLES OF KINESIOTHERAPY.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, AND PHYSIOLOGY OF EXERCISE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*SIX ADDITIONAL HOURS IN EXERCISE THERAPY CLINIC 3-6 MWF AFTERNOON

LECT-DISC	*11	MTUWTH	106	MOG ANNEX	SHELTON

P E 451 SCIENTIFIC FOUNDATIONS OF PHYSICAL FITNESS.
PREREQUISITE--UNDERGRADUATE ANATOMY AND PHYSIOLOGY, TESTS AND MEASUREMENTS.
1 UNIT
*FOUR ADDITIONAL HOURS TO BE ARRANGED.

LECT-DISC	*10	MTUWTH	209	H G	CURETON, BARRY

P E 452 SCIENTIFIC ANALYSIS OF PHYSICAL EDUCATION ACTIVITIES.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, ELEMENTARY PHYSICS, ALGEBRA AND TRIGONOMETRY, OR CONSENT OF INSTRUCTOR.
1 UNIT
*TWO ADDITIONAL HOURS 2-4 WEDNESDAY OR ARRANGE.

LECT-DISC	*11	MTUWTH	209	H G	COOPER

P E 490 SEMINAR.
NO CREDIT

LECT-DISC	7-9PM	TU TH	209	H G	CURETON, BARRY

P E 493 SPECIAL PROJECTS.
1/2 OR 1 UNIT

CONF	ARR	STAFF

P E 495 TECHNIQUES OF RESEARCH IN HEALTH, PHYSICAL EDUCATION, AND RECREATION.
1 UNIT
*FOUR ADDITIONAL HOURS IN LAB. SESSION BY APPOINTMENT.

LECT-DISC	*11	MTUWTH	301	H G	HUBBARD

P E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

PHYSICAL EDUCATION FOR WOMEN

DEPARTMENT OFFICE 117 W GYM

FRESHMEN AND SOPHOMORES--OF THE FOUR SEMESTERS REQUIRED IN PHYSICAL EDUCATION, THE DEPARTMENT RECOMMENDS ONE SEMESTER OF BASIC MOVEMENT-P E W 103, ONE SEMESTER OF SWIMMING--P E W 110 OR 111, ONE SEMESTER OF A TEAM SPORT--P.E.W. 120, 121, 122, 123, 124, OR MODERN DANCE, P.E.W. 104, OR MODERN GYMNASTICS, P.E.W. 107, AND ONE SEMESTER OF AN ELECTIVE--P.E.W. 106, 112, 113, 114, 115, 117, 130, 131, 132, 133, 134, 135, 136, 140, 142, 143, 144, 145, OR OTHER COURSE NOT PREVIOUSLY TAKEN.

SERVICE COURSES FOR UNDERGRADUATES

P E W 110 ELEMENTARY SWIMMING.
1 HOUR

LAB	F	1	MTUWTHF	116	E B POOL	HARRIS
LAB	G	2	MTUWTHF	116	E B POOL	CULLEN

P E W 111 SUB-INTERMEDIATE SWIMMING.
1 HOUR

LAB	H	3	MTUWTHF	116	E B POOL	HARRIS

P E W 112 INTERMEDIATE SWIMMING.
1 HOUR

LAB	H	3	MTUWTHF	116	E B POOL	HARRIS

P E W 131 GOLF.
1 HOUR

LAB	D	11	MTUWTHF	11	W GYM	CULLEN

P E W 136 TENNIS.
1 HOUR

LAB	B	9	MTUWTHF	311	W GYM	YOUNG

P E W 142 BALLROOM DANCE.
SAME AS P.E.M. 142.
1 HOUR

LAB	L	7-9PM	MTU	310	W GYM	DASCH
	L	7PM	W	310	W GYM	

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E W 220 PHYSICAL EDUCATION FOR THE CLASSROOM TEACHER.
SAME AS P.E.M. 220.
PREREQUISITE--JUNIOR STANDING. NON-PHYSICAL EDUCATION MAJOR.
2 HOURS

LAB-DISC	A	8	MTUWTH	129	W GYM	DROM

P E W 231 INDIVIDUAL SPORT PROGRAM FOR SECONDARY SCHOOL GIRLS.
PREREQUISITE--P.E.W. 230 OR CONSENT OF INSTRUCTOR.
4 HOURS

LAB-DISC	A	8-12	MTUWTH	128	W GYM	SOUDER

PHYSICS

DEPARTMENT OFFICE 211 P B

ENGINEERING PHYSICS CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.CURRICULUM IN PHYSICS--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.GENERAL CURRICULUM MAJOR--TWENTY HOURS IN PHYSICS. INCLUDING PHYSICS 321. 341. AND 342. AND EXCLUDING COURSES WITH NUMBERS LOWER THAN 270.

L.A.S.GENERAL CURRICULUM MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS. WITH NOT LESS THAN EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY. CHEMISTRY. EDUCATION. GEOLOGY. MATHEMATICS. ZOOLOGY OR ANY ONE BRANCH OF ENGINEERING.

PHYSICS 101 AND 102 ARE RECOMMENDED TO PREMEDICAL. PREDENTAL. ARCHITECTURE. AND OTHER STUDENTS NOT SPECIALIZING IN PHYSICS. MATHEMATICS. CHEMISTRY OR ENGINEERING.

THE CALCULUS PREREQUISITE FOR CERTAIN COURSES MAY BE SATISFIED EITHER BY MATH. 132 AND 142. OR MATH. 133 AND 143.

COURSES FOR UNDERGRADUATES

PHYCS 106 GENERAL PHYSICS--MECHANICS.
FOR STUDENTS IN ENGINEERING. MATHEMATICS. PHYSICS. AND CHEMISTRY.
PREREQUISITE--MATH. 122. 123--CREDIT OR REGISTRATION IN MATH. 132 OR 133.
4 HOURS

LECT		8	TUWTHF	100	P L	
QUIZ	A	10-12	TU TH	305	P L	
LAB	A	10-12	W F	212	P L	
QUIZ	B	10-12	W F	56	M E B	
LAB	B	10-12	TU TH	212	P L	

PHYCS 107 GENERAL PHYSICS--HEAT, ELECTRICITY, AND MAGNETISM.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 106, CREDIT OR REGISTRATION IN MATH. 142 OR 143.
4 HOURS
*FOR JAMES SCHOLARS AND OTHER HONOR STUDENTS.

LECT	11	MTUWTH	100	P L
QUIZ	1-3	M W	305	P L
LAB	1-3	TU TH	312	P L

PHYCS 108 GENERAL PHYSICS--WAVE MOTION, SOUND, LIGHT, AND MODERN PHYSICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN MATH. 142 OR 143
4 HOURS
*FOR JAMES SCHOLARS AND OTHER HONOR STUDENTS.

LECT	2	MTUWTH	100	P L
QUIZ	10-12	M W	60	M E B
LAB	10-12	TU TH	312	P L

COURSES FOR GRADUATES

PHYCS 497 INDIVIDUAL STUDY.
1/2 OR 1 UNIT

CONF	ARR	STAFF

PHYCS 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

PHYSIOLOGY

DEPARTMENT OFFICE 524 BURRILL HALL

MAJOR--TWENTY HOURS IN ANIMAL PHYSIOLOGY, OF WHICH TEN OR MORE MUST BE FROM DEPARTMENTAL COURSES IN THE ADVANCED GROUP. IN ADDITION, THE STUDENTS PROGRAM MUST INCLUDE ONE SEMESTER EACH OF VERTEBRATE EMBRYOLOGY, ORGANIC CHEMISTRY, AND PHYSICAL CHEMISTRY, AND TWO SEMESTERS OF GENERAL PHYSICS. CALCULUS IS STRONGLY RECOMMENDED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, MICROBIOLOGY, PHYSICS, ZOOLOGY.

COURSES FOR UNDERGRADUATES

PHYSL 103 INTRODUCTION TO HUMAN PHYSIOLOGY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		1	MTUWTH	140	BUR HALL	STOLPE
LAB	1	2-4	M W	413	BUR HALL	
DISC	1	2-4	TU TH	436	BUR HALL	
LAB	2	2-4	TU TH	413	BUR HALL	
DISC	2	2-4	M W	436	BUR HALL	

COURSES FOR ADVANCED UNDERGRADUATES

PHYSL 290 READING COURSE.
PREREQUISITE--A COURSE IN PHYSIOLOGY, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

CONF	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PHYSL 302 EXPERIMENTAL ANIMAL PHYSIOLOGY.
SAME AS ZOOL. 302.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS, AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHF	140	BUR HALL	ANDERSON
LAB	9-12	MTU	523	BUR HALL	
LAB	10-12	W	523	BUR HALL	
DISC	9	W	523	BUR HALL	

PHYSL 369 INTRODUCTION TO HUMAN ECOLOGY.
SAME AS GEOG., ANTH., ZOOL., AND SOC. 369.
PREREQUISITE--ONE YEAR OF BIOLOGY, AND ONE YEAR OF ANTHROPOLOGY, GEOGRAPHY, GEOLOGY, OR SOCIOLOGY.
*A TERM PAPER IS REQUIRED FOR CREDIT, DEPENDING UPON THE NATURE AND MAGNITUDE OF THIS PAPER THE CREDIT MAY BE 3 OR 5 HOURS.
*3 OR 5 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	10-12	MTUW	137	D H	SHIMKIN AND OTHERS

COURSES FOR GRADUATES

PHYSL 491 INDIVIDUAL TOPICS.
PREREQUISITE--APPROVAL OF DEPARTMENT.
1/2 TO 2 UNITS
CONF ARR STAFF

PHYSL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

PLANT PATHOLOGY

DEPARTMENT OFFICE 218 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PL PA 300 SPECIAL PROBLEMS.
UNDERGRADUATE PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
*MAXIMUM CREDIT EIGHT HOURS OR TWO UNITS.
*2 TO 4 HOURS, OR 1/4 TO 1 UNIT
BEVER, BLACK, BRITTON, CARTER, CHAMBERLAIN, GERDEMANN HOOKER, LINN, POWELL, SHAW, SHURTLEFF, THORNBERRY TAYLOR
CONF ARR

COURSES FOR GRADUATES

PL PA 499 THESIS RESEARCH.
PREREQUISITE--PL. PA. 301 AND 302 OR EQUIVALENT.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
BEVER, BLACK, CARTER, CHAMBERLAIN, GERDEMANN HOOKER, LINN, POWELL, SHAW, TAYLOR THORNBERRY
CONF ARR

POLITICAL SCIENCE

DEPARTMENT OFFICE 324 L H

MAJOR--TWENTY HOURS FROM COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE. A MAJOR MAY INCLUDE THREE SEMESTER HOURS FROM THE FOLLOWING COURSES--ECONOMICS 170, 171--STATISTICS--, ECONOMICS 214--PUBLIC FINANCE--, HISTORY 345, 346, 369, 370--CONSTITUTIONAL HISTORY--, MATHEMATICS 161--STATISTICS--, PSYCHOLOGY 135--STATISTICS AND SOCIOLOGY 185--STATISTICS--. NO STUDENT ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1961, MAY OFFER MORE THAN EIGHT HOURS OF 100 LEVEL COURSES AS PART OF A POLITICAL SCIENCE MAJOR.

MINOR--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, EDUCATION, FINANCE, GEOGRAPHY, HISTORY, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PSYCHOLOGY, SOCIAL WORK, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN-AMERICAN STUDIES RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR.

POL. SCI. 150 AND 151 GIVE A GENERAL SURVEY OF NATIONAL, STATE, AND LOCAL GOVERNMENT IN THE UNITED STATES. POL. SCI. 191 AND 192 PRESENT A SURVEY OF THE BASIC CONCEPTS AND METHODS OF POLITICAL SCIENCE AND SIGNIFICANT CURRENT GOVERNMENTAL AND POLITICAL PROBLEMS AND POLICIES. UNDERGRADUATES BEGINNING THE STUDY OF POLITICAL SCIENCE ARE ADVISED TO TAKE, FIRST, EITHER POL. SCI. 150 OR 191. STUDENTS PLANNING TO DO ADVANCED WORK SHOULD, DURING THE SOPHOMORE YEAR, TAKE EITHER POL. SCI. 150 OR 191 AND FOLLOW IT WITH SUCH OTHER COURSES AS WILL COMPLETE ONE OF THE FOLLOWING COMBINATIONS--150 AND 151, 150 AND 192, OR 191 AND 192.

COURSES FOR UNDERGRADUATES

POL S 150 AMERICAN GOVERNMENT--ORGANIZATION AND POWERS.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR, OR CONSENT OF INSTRUCTOR.
#CREDIT IS NOT GIVEN FOR BOTH POL. S. 150 AND 191.
#3 HOURS
#FOR JAMES SCHOLARS AND OTHER STUDENTS HAVING A GRADE AVERAGE OF 4.0 OR ABOVE.

LECT-DISC	A	7	TU	109	L H	BUTWELL
	A	10	MTUWTHF	109	L H	BUTWELL
LECT-DISC	B	9-11	TU TH	300	L H	SULLIVAN
	B	1-3	M	300	L H	SULLIVAN
LECT-DISC	C	2-4	W	109	L H	DOUGLAS
	C	11	MTUWTH	109	L H	DOUGLAS

COURSES FOR ADVANCED UNDERGRADUATES

POL S 291 THESIS AND HONORS COURSE.
PREREQUISITE--OPEN ONLY TO SENIORS WHOSE MAJOR IS POLITICAL SCIENCE AND WHO HAVE A GENERAL UNIVERSITY AVERAGE OF AT LEAST 4.0.
2 TO 5 HOURS

LECT-DISC	ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

POL S 328 AN INTRODUCTION TO THE STUDY OF POLITICAL BEHAVIOR.
PREREQUISITE--POL. S. 150 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	9-11	M W F	300	L H	SULLIVAN

POL S 347 GOVERNMENTS AND POLITICS OF SOUTH AND SOUTHEAST ASIA.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	7	TH	300	L H	BUTWELL
	8	MTUWTHF	300	L H	BUTWELL

COURSES FOR GRADUATES

POL S 450 CONTEMPORARY GOVERNMENTAL PROBLEMS.
*STUDENTS MAY ACCUMULATE THREE UNITS.
*1 UNIT
LECT-DISC 2-4 TU TH 301 L H DOUGLAS

POL S 493 RESEARCH IN SELECTED TOPICS.
1 UNIT
LECT-DISC ARR STAFF

POL S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
LECT-DISC ARR DOUGLAS, BUTWELL, SULLIVAN

PORTUGUESE

DEPARTMENT OFFICE 218 L H

COURSES FOR GRADUATES

PORT 491 SPECIAL TOPICS IN PORTUGUESE.
1/2 OR 1 UNIT
CONF ARR STAFF

PORT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
CONF ARR ALLEN

PSYCHOLOGY

DEPARTMENT OFFICE 316 G H

MAJOR--TWENTY HOURS IN PSYCHOLOGY, EXCLUDING PSYCH. 100 AND 103, AND D.G.S. 171. TWO TYPES OF MAJOR PROGRAMS ARE OFFERED--THE GENERAL MAJOR, SUITABLE FOR STUDENTS INTERESTED PRIMARILY IN GENERAL LIBERAL EDUCATION, AND THE HONORS MAJOR, DESIGNED MAINLY TO PREPARE STUDENTS FOR GRADUATE STUDY IN PSYCHOLOGY.

GENERAL MAJOR--IN THIS PROGRAM THERE ARE NO PRESCRIBED COURSES.

HONORS MAJOR--THIS PROGRAM MUST INCLUDE PSYCHOLOGY 135, 290, AND TWO OF THE FOLLOWING COURSES--PSYCH. 330, 331, 345, 360, WITH THE CONSENT OF THE MAJOR ADVISOR. THE EQUIVALENT OF ANY OF THESE COURSES MAY BE SUBSTITUTED. THE HONORS MAJOR IS STRONGLY URGED TO TAKE--A - WORK IN H SECTIONS, WHEN AVAILABLE, AND IN ADVANCED COURSES IN PSYCHOLOGY. B - MATHEMATICS THROUGH CALCULUS. C - AT LEAST A FULL YEAR LABORATORY COURSE IN ANOTHER SCIENCE. D - AT LEAST TWO YEARS OF FRENCH, GERMAN, OR RUSSIAN, WITH TWO YEARS IN EACH OF TWO OF THESE BEING HIGHLY DESIRABLE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, CHEMISTRY, ECONOMICS, EDUCATION, HISTORY, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PHYSICS, PHYSIOLOGY, POLITICAL SCIENCE, SOCIAL WORK, SOCIOLOGY, SPEECH, AND ZOOLOGY.

DEPARTMENTAL DISTINCTION--THE MINIMUM REQUIREMENTS FOR GRADUATION WITH DEPARTMENTAL DISTINCTION IN PSYCHOLOGY ARE AS FOLLOWS--A - ELIGIBILITY FOR COLLEGE HONORS. B - SATISFACTORY COMPLETION OF THE COURSES REQUIRED IN THE HONORS MAJOR PROGRAM. C - FOUR HOURS OF CREDIT IN PSYCHOLOGY 291-292. INCLUDING AN ACCEPTABLE THESIS.

COURSES FOR UNDERGRADUATES

PSYCH 100 INTRODUCTION TO PSYCHOLOGY.
NOT OPEN TO STUDENTS ELECTING PSYCH. 103 OR D.G.S. 171.
REQUIRES FIVE HOURS OF PARTICIPATION IN LABORATORY EXPERIMENTS
4 HOURS
*STUDENTS IN LECT. A MUST ELECT A QUIZ SECTION A. IN LECT. B. A QUIZ SECTION B. ETC.

LECT	*A	9	MTUWTHFS	100	G	H	MCALLISTER
QUIZ	A1	11	M W	313	G	H	
QUIZ	A2	8	W F	313	G	H	
LECT	*B	10	MTUWTHFS	100	G	H	COHEN
QUIZ	B1	8	TU TH	313	G	H	COHEN
QUIZ	B2	11	TU TH	313	G	H	COHEN

COURSES FOR ADVANCED UNDERGRADUATES

PSYCH 216 CHILD PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
3 HOURS

LECT	9	MTUWTHFS	313	G	H	GORE

PSYCH 255 SOCIAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 101 AND 255.
*3 HOURS

LECT	10	MTUWTHFS	313	G	H	MEUWESE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PSYCH 338 ABNORMAL PSYCHOLOGY.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY. JUNIOR STANDING EXCEPT FOR THOSE IN THE PREMEDICAL CURRICULUM WHO MAY TAKE THE COURSE AS SECOND SEMESTER SOPHOMORES WITH FOUR HOURS OF PSYCHOLOGY.
3 HOURS. OR 1/2 OR 1 UNIT

LECT	10-12	TUWTH	315	G	H	GORE

PSYCH 348 THE PSYCHOLOGY OF LEARNING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS. OR 1/2 OR 1 UNIT

LECT	8-10	TUWTH	315	G	H	FRANKMANN

COURSES FOR GRADUATES

NOTE--THE PREREQUISITES STATED APPLY TO GRADUATE MAJORS IN PSYCHOLOGY. STUDENTS MINORING IN PSYCHOLOGY MAY. BY SPECIAL PERMISSION OF INSTRUCTORS. ENROLL IN CERTAIN OF THESE COURSES WITHOUT HAVING MET ALL OF THE PREREQUISITES.

PSYCH 408 DESIGN OF EXPERIMENTS IN PSYCHOLOGY.
PREREQUISITE--PSYCH. 307.
1 UNIT

LECT	10-12	TU TH	445	G	H	FRANKMANN

PSYCH 441 PERSONALITY AND BEHAVIOR DYNAMICS.
PREREQUISITE--TWELVE HOURS OF PSYCHOLOGY.
1/2 UNIT

LECT	1-5	W	445	G	H	ALSOBROOK

PSYCH 466 TEST CONSTRUCTION.
PREREQUISITE--PSYCH. 495. PSYCH. 462 OR 467.
1 UNIT

LECT	8-10	TU TH	445	G	H	HUMPHREYS

PSYCH 467 PERSONALITY ASSESSMENT.
PREREQUISITE--PSYCH. 307 OR EQUIVALENT.
1 UNIT
LECT 1-3 TU TH 445 G H HUNDLEBY

RADIO AND TELEVISION

DEPARTMENT OFFICE 38 G H

COURSES FOR ADVANCED UNDERGRADUATES

R TV 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS
CONF ARR LIPPOLD

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R TV 360 EDUCATIONAL USES OF TELEVISION AND RADIO.
SAME AS ED. 360.
3 HOURS. OR 1/2 UNIT
MEETS FIRST FOUR WEEKS
*TWO ADDITIONAL HOURS TO BE ARRANGED
LECT-DISC *10-12 TUWTHF 205 E B MCINTYRE

R TV 366 ADVANCED RADIO AND TELEVISION PRACTICES. I.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION. CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT
CONF ARR LIPPOLD

R TV 367 ADVANCED RADIO AND TELEVISION PRACTICES. II.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION. CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT
CONF ARR LIPPOLD

COURSES FOR GRADUATES

R TV 450 SPECIAL PROBLEMS IN TELEVISION.
PREREQUISITE--A TELEVISION COURSE IN THE AREA OF SPECIALIZATION. CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 UNITS
*1 OR 2 UNITS
CONF ARR LIPPOLD

R TV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN RADIO AND TELEVISION.
1 OR 2 UNITS
CONF ARR STAFF

RECREATION AND MUNICIPAL PARK ADMINISTRATION

DEPARTMENT OFFICE 203 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

REC 278 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
CONF ARR FRYE, GARRET

REC 279 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
CONF ARR FRYE, GARRET

COURSES FOR GRADUATES

REC 401 FOUNDATIONS OF RECREATION.
PREREQUISITE--REC. 176 OR EQUIVALENT.
1 UNIT
LECT-DISC 9 MTUWTH 207A H G BRIGHTBILL

REC 493 SPECIAL PROJECTS.
PREREQUISITE--REC. 403 OR EQUIVALENT, RECREATION MAJOR.
1/2 TO 2 UNITS, SUMMER--1/2 OR 1 UNIT
CONF ARR BRIGHTBILL

REC 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR BRIGHTBILL

RHETORIC

INCLUDING RHETORIC AND COMPOSITION, ENGLISH
FOR FOREIGN STUDENTS, AND BUSINESS ENGLISH

RHETORIC AND COMPOSITION

DEPARTMENT OFFICE 109 E B

MAJOR--TWENTY HOURS IN ENGLISH EXCLUDING RHET. 101, 102, 107, 108, 151, 200, 271, 272, ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND INCLUDING TEN HOURS OF ENGLISH OR AMERICAN LITERATURE, AT LEAST SIX OF WHICH MUST BE CHOSEN FROM THE ADVANCED GROUPS, AND TEN HOURS IN COMPOSITION CHOSEN FROM RHET. 143, 144, 205 206, 227, 246, 255, 256, 263, 330 AND INCLUDING AT LEAST ONE COURSE IN EXPOSITORY WRITING. WITH THE PERMISSION OF THE ADVISER, ONE OF THE FOLLOWING COURSES MAY BE COUNTED TOWARD A COMPOSITION MAJOR--SPEECH 363, JOURN. 266, 326.
STUDENTS WHO PLAN TO ENTER GRADUATE COLLEGE MUST SATISFY THE REQUIREMENTS OF TWENTY HOURS OF COURSES IN ENGLISH AND AMERICAN LITERATURE.

MINOR--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC--NOT INCLUDING APPLIED MUSIC--COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS, WITH THE WRITTEN APPROVAL OF THE HEAD OF THE DEPARTMENT. OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJOR OF THEIR DEPARTMENT EXCEPT FRENCH 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

COURSES FOR UNDERGRADUATES

RHET 101 FRESHMAN RHETORIC AND COMPOSITION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	112	E B	
	A	12	TU	112	E B	
LECT-DISC	B	9	MTUWTHF	112	E B	
	B	12	M	112	E B	
LECT-DISC	D	11	MTUWTHF	112	E B	
	D	12	W	112	E B	

RHET 102 FRESHMAN RHETORIC AND COMPOSITION.
PREREQUISITE--RHET. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	223	E B	
	A	12	M	223	E B	
LECT-DISC	C	10	MTUWTHF	223	E B	
	C	12	TH	223	E B	
LECT-DISC	D	11	MTUWTHF	223	E B	
	D	12	W	223	E B	

RHET 133 PRINCIPLES OF COMPOSITION.
PREREQUISITE--RHET. 102 OR EQUIVALENT.
*CREDIT IS NOT GIVEN FOR RHET. 133 IN ADDITION TO RHET. 143.
*3 HOURS

LECT-DISC	B	9	MTUWTHF	210A	E B	DAVIS
	B	12	M	210A	E B	

COURSES FOR ADVANCED UNDERGRADUATES

RHET 200 REMEDIAL WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH.
NO CREDIT

LECT-DISC	A	8	MTUWTHF	107	L H	STONE
	A	12	M	107	L H	
LECT-DISC	B	9	MTUWTHF	107	L H	
	B	12	TU	107	L H	
LECT-DISC	D	11	MTUWTHF	107	L H	
	D	12	W	107	L H	

RHET 205 ADVANCED NARRATIVE WRITING, I.
PREREQUISITE--RHET. 144 OR EQUIVALENT.
3 HOURS

LECT-DISC	C	10	MTUWTHF	210A	E B	CURLEY
	C	12	W	210A	E B	

COURSES FOR GRADUATES

RHET 480 THEORY AND PRACTICE OF ENGLISH COMPOSITION.
1/2 UNIT
LAB-DISC B 9-11 MTU THF 112 E B MOAKE

ENGLISH FOR FOREIGN STUDENTS

DEPARTMENT OFFICE 317 E B

NOTE--NO STUDENT IS PERMITTED TO REGISTER FOR ANY COURSE IN ENGLISH AS A FOREIGN LANGUAGE UNTIL HE HAS TAKEN THE EXAMINATION IN ENGLISH FOR FOREIGN STUDENTS. AUDITORS ARE NOT PERMITTED. RHETORIC 114 AND 115 FULFILL GRADUATION REQUIREMENTS IN RHETORIC. STUDENTS MAY BE REQUIRED TO TAKE MORE ELEMENTARY COURSES BEFORE THEY ARE PERMITTED TO TAKE RHET. 114. ADVISERS SHOULD CONSULT THE UNDERGRADUATE STUDY BULLETIN UNDER THE SECTION ENTITLED--GENERAL REQUIREMENTS FOR GRADUATION-ENGLISH--FOR THE DEFINITION OF A FOREIGN STUDENT.

COURSES FOR UNDERGRADUATES

RHET 109 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND INSTRUCTIONS. CONCURRENT REGISTRATION IN RHET. 110.
NO CREDIT
LECT-DISC A 8-10 MTUWTHFS 119 E B ENATA

RHET 110 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS. CONCURRENT REGISTRATION IN RHET. 109
NO CREDIT
LECT-DISC C 10 MTUWTHFS 238 L H DALTON

RHET 111 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--RHET. 109 AND 110, OR CONSENT OF INSTRUCTOR.
NO CREDIT
LECT-DISC A 8-10 MTUWTHFS 238 L H FOX

RHET 114 ENGLISH AS A FOREIGN LANGUAGE. I.
PREREQUISITE--RHET. 111 OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT.
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS
LECT-DISC D 11 MTUWTHFS 119 E B HUSSEY

RHET 115 ENGLISH AS A FOREIGN LANGUAGE. II.
PREREQUISITE--RHET. 114.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT.
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS
LECT-DISC C 10 MTUWTHFS 119 E B HUSSEY

COURSES FOR GRADUATES

RHET 400 ENGLISH AS A FOREIGN LANGUAGE FOR GRADUATE FOREIGN STUDENTS.
PREREQUISITE--GRADUATE STANDING AND RHET. 111, OR CONSENT OF INSTRUCTOR.
3 HOURS, NO GRADUATE CREDIT.
LECT-DISC E 1-3 M W F 119 E B KEEN

BUSINESS ENGLISH

DEPARTMENT OFFICE 101 D K H

COURSES FOR UNDERGRADUATES

RHET 151 BUSINESS LETTER WRITING.
PREREQUISITE--RHET. 101 AND 102.
3 HOURS

LECT-DISC	C	10	MTUWTHF	106	D K H	MAGUIRE
	C	2	TU	106	D K H	MAGUIRE
LECT-DISC	D	11	MTUWTHF	106	D K H	GIESELMAN
	D	2	TU	326	D K H	GIESELMAN

COURSES FOR ADVANCED UNDERGRADUATES

RHET 272 REPORT WRITING.
PREREQUISITE--RHET. 101, 102, AND 151, OR CONSENT OF CHAIRMAN OF DIVISION.
2 HOURS

LECT-DISC	B	9	MTUWTH	106	D K H	LORD
LECT-DISC	C	10	MTUWTH	326	D K H	CHAPDU

RURAL SOCIOLOGY

SEE AGRICULTURAL ECONOMICS

RUSSIAN

DEPARTMENT OFFICE 237 L H

MAJOR--TWENTY HOURS OF RUSSIAN EXCLUDING RUSSIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, A MINIMUM OF THREE HOURS IN RUSSIAN 321, 322, 323, 324, AND 332, AND A MINIMUM OF TWO AND A MAXIMUM OF SIX HOURS IN RUSSIAN 309, 310, 312, 331.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH--EXCLUDING RHET. 101 AND 102--, FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, POLITICAL SCIENCE, PORTUGUESE, SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GER. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT SUBJECT. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES--WITH THE EXCEPTION OF COURSES IN RUSSIAN--IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

RUSS 101 FIRST-YEAR RUSSIAN. I.
FOR STUDENTS WHO HAVE NO CREDIT IN RUSSIAN.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR RUSS. 101 WITHOUT RUSS. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	10-12	MTUWTH	227	L H

RUSS 102 FIRST-YEAR RUSSIAN. II.
PREREQUISITE--RUSS. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
LECT-DISC 10-12 MTUWTH 120 L H

RUSS 103 SECOND-YEAR RUSSIAN. I.
PREREQUISITE--RUSS. 102 OR EQUIVALENT.
4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
LECT-DISC 9-11 MTUWTH 1 G H MATLAW

COURSES FOR ADVANCED UNDERGRADUATES

RUSS 211 ORAL RUSSIAN. I.
PREREQUISITE--RUSS. 103 AND 104 OR CONSENT OF INSTRUCTOR.
2 HOURS
LECT-DISC 11 MTUWTH 1 G H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RUSS 333 THE RUSSIAN SHORT NOVEL.
PREREQUISITE--RUSS. 104 OR CONSENT OF INSTRUCTOR.
2 HOURS. OR 1/2 UNIT
LECT-DISC 2 MTUWTH 239 L H TERRAS

COURSES FOR GRADUATES

RUSS 400 BEGINNING RUSSIAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.
LECT-DISC A 8-10 MTUWTH 227 L H THAYER
LECT-DISC E 1-3 MTUWTH 1 G H

RUSS 401 READINGS IN RUSSIAN FOR GRADUATE STUDENTS.
PREREQUISITE--RUSS. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
LECT-DISC A 8-10 MTUWTH 120 L H BILOKUR

RUSS 413 MODERN RUSSIAN DRAMA.
PREREQUISITE--RUSS. 322. 324.
1 UNIT
LECT-DISC 12 MTUWTH 239 L H MATLAW

RUSS 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN RUSSIAN.
1/4 TO 3 UNITS.
CONF ARR STAFF

CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES

DEPARTMENT OFFICE 110 DAVENPORT HOUSE

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

MAJOR--STUDENTS WHO ELECT RUSSIAN LANGUAGE AND AREA STUDIES AS A MAJOR MUST.
1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE GENERAL CURRICULUM.
2-COMPLETE AT LEAST TWENTY SEMESTER HOURS OF RUSSIAN LANGUAGE COURSES. IN ADDITION TO RUSS. 101-102, OR DEMONSTRATE EQUIVALENT PROFICIENCY.
3-COMPLETE A MAJOR CONSISTING OF AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST FOUR DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE PROGRAM OF RUSSIAN LANGUAGE AND AREA STUDIES MAY NOT COUNT AS PART OF THIS TWENTY HOURS.

ANTH. 381, 382	POL. S. 335, 383
ECON. 312	RUSS. 309, 310, 312, 321, 322,
GEOG. 353	323, 324, 325, 332, 333
HIST. 219, 220, 327, 328	SOC. 350
LAW 369	

4-COMPLETE A MINOR OF TWENTY HOURS, EXCLUDING COURSES OPEN TO FRESHMEN, IN ONE OR TWO DEPARTMENTS. IF TWO ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH. COURSES IN THE RUSSIAN LANGUAGE MAY, WITH THE APPROVAL OF THE CENTER DIRECTOR, CONSTITUTE ALL OR PART OF THIS MINOR.

RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR--A MINOR IN RUSSIAN LANGUAGE AND AREA STUDIES, DESIGNED TO ACCOMPANY A MAJOR IN ANY DEPARTMENT, REQUIRES AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST THREE DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. IT ALSO REQUIRES A KNOWLEDGE OF RUSSIAN EQUIVALENT AT LEAST TO THAT NORMALLY ATTAINED AFTER RUSS. 101-102.

ANTH. 381, 382	POL. S. 335, 383
ECON. 312	RUSS. 309, 310, 312, 321,
GEOG. 353	322, 323, 324, 325, 332, 333
HIST. 219, 220, 327, 328	SOC. 350
LAW 369	

GRADUATE MINORS IN RUSSIAN LANGUAGE AND AREA STUDIES

MINOR FOR THE MASTERS DEGREE--A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST EARN AT LEAST TWO UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN BELOW. THE COURSES CHOSEN MUST BE IN AT LEAST TWO DEPARTMENTS

ANTH. 381, 382	POL. S. 335, 383, 435
ECON. 312	RUSS. 309, 310, 312, 321, 322,
GEOG. 353, 495	323, 324, 325, 332, 333, 405, 410,
HIST. 327, 328, 419, 420	412, 413, 414, 416, 417, 421
LAW 369	SOC. 350, 450

MINOR FOR THE PH.D. DEGREE--A DOCTORAL CANDIDATE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST DEMONSTRATE A READING COMMAND OF RUSSIAN AS TESTED BY EXAMINATION OR BY COMPLETION OF RUSSIAN 401 WITH A GRADE OF A OR B. AND IN ADDITION MUST EARN AT LEAST FOUR UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN JUST ABOVE. THE FOUR UNITS MUST BE DISTRIBUTED AMONG AT LEAST TWO DEPARTMENTS. NOT INCLUDING THE DEPARTMENT OFFERING THE CANDIDATES MAJOR.

CERTIFICATE OF GRADUATE SPECIALIZATION IN RUSSIAN LANGUAGE AND AREA STUDIES

THIS CERTIFICATE IS AWARDED BY THE GRADUATE COLLEGE AND THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES. IT IS FOR PERSONS WITH THE BACCALAUREATE WHO ARE ENROLLED IN ADVANCED STUDIES IN ANY DISCIPLINE AND WHO WISH AT THE SAME TIME TO GAIN A KNOWLEDGE OF THE RUSSIAN AREA AND LANGUAGE. THE REQUIREMENTS ARE--1--A GOOD COMMAND OF WRITTEN AND SPOKEN RUSSIAN. AS DETERMINED BY SPECIAL EXAMINATIONS. 2--AT LEAST SIX GRADUATE UNITS RELATING TO RUSSIA. DISTRIBUTED AMONG AT LEAST THREE OF THE DEPARTMENTS REPRESENTED IN THE PROGRAM--ANTHROPOLOGY. ECONOMICS. GEOGRAPHY. HISTORY. LAW. POLITICAL SCIENCE. RUSSIAN AND SOCIOLOGY--IN ADDITION TO THE STUDENTS OWN MAJOR DEPARTMENT. FOR COURSES. SEE ABOVE. 3--A SPECIAL ESSAY BASED LARGELY ON RUSSIAN SOURCES AND TO BE. AT THE MINIMUM. OF THE STANDARD NORMALLY REQUIRED IN A MASTERS THESIS. THE STUDENT MAY SUBMIT. IN FULFILLMENT OF THIS REQUIREMENT. A COPY OF HIS MASTERS THESIS OR DOCTORAL DISSERTATION.

THE ADVISER FOR THE GRADUATE MINORS AND THE CERTIFICATE IS PROFESSOR RALPH T. FISHER. DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES. 105 DAVENPORT HOUSE.

STUDENTS IN OTHER COLLEGES

STUDENTS IN OTHER COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO DESIRE A KNOWLEDGE OF THE RUSSIAN AREA ARE INVITED TO CONSULT. EITHER DIRECTLY OR THROUGH THEIR ADVISERS. WITH THE DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH PROGRAMS MAY IN SOME CASES BE ADOPTED AS A SPECIAL MINOR.

BELOW ARE LISTED COURSES IN THE RUSSIAN AREA WHICH ARE BEING OFFERED THIS TERM. EXCLUDED ARE COURSES REQUIRING A KNOWLEDGE OF RUSSIAN WHICH ARE LISTED IN THE TIMETABLE SECTION DEVOTED TO THE DEPARTMENT OF RUSSIAN. FOR FULL COURSE DESCRIPTIONS. CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS. IF CONSENT OF INSTRUCTOR IS REQUIRED IT MAY BE OBTAINED FROM DR. FISHER FOR STUDENTS ENROLLED IN RUSSIAN LANGUAGE AND AREA STUDIES AS MAJORS OR MINORS.

```
GEOG  353     LECT            9      MTWTH    113  D H
                              1-3     TU      113  D H
     GEOGRAPHY OF THE USSR. 3 HOURS. OR 1/2 UNIT
```

SAFETY EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

```
S ED  284     DRIVER EDUCATION.
        PREREQUISITE--DRIVERS LICENSE. JUNIOR STANDING.
        3 HOURS
        *FOUR ADDITIONAL HOURS PER WEEK TO BE ARRANGED.
              LECT-DISC        *9          MTUWTH    209  HUFF GYM        FLORIO
```

DEPARTMENT OFFICE 342 L H

MAJOR--TWENTY HOURS FROM ANY COURSES IN SOCIOLOGY, EXCLUDING SOCIOL. 100, 104, AND 105. SOCIOLOGY MAJORS ARE STRONGLY ADVISED TO TAKE AT LEAST ONE COURSE IN EACH OF THE FOLLOWING FIELDS--GENERAL SOCIOLOGICAL THEORY--SOC. 221--SOCIETY AND THE INDIVIDUAL--SOC. 212 AND 320--AND SOCIOLOGICAL RESEARCH METHODS--SOC. 385 AND 386. SOC. 185, OR AN EQUIVALENT, IS REQUIRED FOR SOCIOLOGY MAJORS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, HISTORY, LAW, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIAL WORK. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.

DEPARTMENTAL DISTINCTION--IN ORDER TO BE AWARDED DISTINCTION IN SOCIOLOGY AT GRADUATION, THE STUDENT MUST 1 -HAVE AT LEAST A 4.0 ALL UNIVERSITY GRADE POINT AVERAGE, 2 - MEET THE GENERAL REQUIREMENTS FOR A MAJOR IN SOCIOLOGY, AND , 3-IN ADDITION TO THE WORK DONE FOR THE MAJOR EARN FOUR SEMESTER HOURS OF CREDIT BY ENROLLING IN ONE OR BOTH OF THE HONORS COURSES--SOC. 290-291.

COURSES FOR UNDERGRADUATES

SOC 185 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS.
SAME AS ANTH. AND GEOG. 185.
PREREQUISITE--SOC. 100 OR CONSENT OF INSTRUCTOR OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS
LECT-DISC A 930-11 MTUWTH 314 L H LAZERWITZ

COURSES FOR ADVANCED UNDERGRADUATES

SOC 221 CONTEMPORARY SOCIETY.
PREREQUISITE--SOC. 100, OR 104, AND 105, OR D.G.S. 151 AND 152--SOC. 243--JUNIOR STANDING.
3 HOURS
LECT-DISC A 9 MTUWTHFS 326 L H AHRENS

SOC 225 RACIAL AND CULTURAL MINORITIES.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D.G.S. 151 AND 152, JUNIOR STANDING.
3 HOURS
LECT-DISC A 11 MTUWTHFS 303B L H TOMASSON

SOC 243 SOCIAL EVOLUTION.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D.G.S. 151 AND 152. JUNIOR STANDING.
3 HOURS
LECT-DISC A 8 MTUWTHFS 326 L H AHRENS

SOC 290 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS
CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOC 326 SOCIAL MOBILITY AND CLASS STRUCTURE.
PREREQUISITE--SOC. 223, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC A 7-10PM M W 326 L H TOMASSON

SOC 369 INTRODUCTION TO HUMAN ECOLOGY.
SAME AS GEOG., ANTH., PHYSL., AND ZOOL. 369.
PREREQUISITE--ONE YEAR OF BIOLOGY AND ONE YEAR OF ANTHROPOLOGY, GEOGRAPHY, GEOLOGY, OR SOCIOLOGY.
*A TERM PAPER IS REQUIRED FOR CREDIT, DEPENDING UPON THE NATURE AND MAGNITUDE OF THIS PAPER THE CREDIT MAY BE 3 OR 5 HOURS.
*3 OR 5 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC A 10-12 MTUW 137 D H SHIMKIN AND OTHERS

SOC 370 POPULATION AND SOCIAL ECOLOGY.
SAME AS R. SOC. 370.
PREREQUISITE--SOC. 185 OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT
LECT-DISC A 1-230 MTUWTH 326 L H LAZERWITZ

COURSES FOR GRADUATES

SOC 435 FIELD INSTRUCTION AND RESEARCH IN PENAL SOCIOLOGY.
APPLICATION FOR ADMISSION TO THIS COURSE MUST BE MADE IN APRIL PRIOR TO THE SUMMER SESSION IN WHICH ENROLLMENT IS DESIRED.
PREREQUISITE--SOC. 324 AND 331 OR EQUIVALENT, CONSENT OF INSTRUCTOR, AND PASSING ROUTINE EMPLOYMENT CLEARANCE PROCEDURES BY THE PRISON.
1 UNIT
CONF ARR STAFF

SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS R. SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
CONF ARR STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
1/2 TO 2 UNITS
CONF ARR STAFF

SOC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS
CONF *A ARR STAFF
CONF *B ARR STAFF

SPANISH

DEPARTMENT OFFICE 218 L H

MAJOR--TWENTY HOURS IN SPANISH, EXCLUDING SPANISH 101, 102, 103, 113 AND 114, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. EITHER LING. 300, INTRODUCTION TO LINGUISTICS, OR LING. 302, COMPARATIVE LINGUISTICS MAY BE COUNTED TOWARD THE MAJOR IN SPANISH. EITHER SOC.SCI. 101 OR 102, LATIN-AMERICAN CIVILIZATION, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH AND IS REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN. EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LATIN-AMERICAN STUDIES, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, AND RUSSIAN.

COURSES FOR UNDERGRADUATES

SPAN 101 ELEMENTARY SPANISH, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR SPAN. 101 WITHOUT SPAN. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL.

LECT-DISC	10-12	MTUWTH	224	L H	BLAYLOCK

SPAN 102 ELEMENTARY SPANISH, II.
PREREQUISITE--SPAN. 101 OR ONE YEAR OF HIGH SCHOOL SPANISH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL

LECT-DISC	10-12	MTUWTH	219	L H	BALDWIN

SPAN 103 INTERMEDIATE SPANISH, I.
PREREQUISITE--SPAN. 102 OR TWO YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

LECT-DISC	3-5	MTUWTH	111	G H	FORSTER

SPAN 104 INTERMEDIATE SPANISH, II.
PREREQUISITE--SPAN. 103 OR THREE YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

LECT-DISC	8-10	MTUWTH	219	L H	LEAL

COURSES FOR ADVANCED UNDERGRADUATES

SPAN 211 INTERMEDIATE COMPOSITION AND CONVERSATION, I.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
3 HOURS

LECT-DISC	9	MTUWTHF	108	L H
	10	F	108	L H

SPAN 212 INTERMEDIATE COMPOSITION AND CONVERSATION, II.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 211 OR EQUIVALENT.
3 HOURS

LECT-DISC	9	MTUWTHF	108	L H
	10	F	108	L H

SPAN 213 ADVANCED COMPOSITION AND CONVERSATION, I.
PREREQUISITE--SPAN. 212 OR EQUIVALENT.
3 HOURS

LECT-DISC	9	MTUWTHF	108	L H
	10	F	108	L H

SPAN 214 ADVANCED COMPOSITION AND CONVERSATION, II.
PREREQUISITE--SPAN. 213 OR EQUIVALENT.
3 HOURS

LECT-DISC	9	MTUWTHF	108	L H	BALDWIN
	10	F	108	L H	

SPAN 291 SENIOR THESIS.
FOR CANDIDATES FOR HONORS IN SPANISH.
2 HOURS

CONF	ARR				STAFF

SPAN 302 SURVEY OF SPANISH LITERATURE.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
3 HOURS. OR 1/2 UNIT

LECT-DISC	11	MTUWTHF	133	L	H	FLORES
	10	F	133	L	H	

SPAN 303 SURVEY OF SPANISH-AMERICAN LITERATURE.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
3 HOURS. OR 1/2 UNIT

LECT-DISC	1	MTUWTHF	219	L	H	FORSTER
	9	F	219	L	H	

SPAN 304 SURVEY OF SPANISH-AMERICAN LITERATURE.
PREREQUISITE--SPAN. 201 AND 202 OR EQUIVALENT.
3 HOURS. OR 1/2 UNIT

LECT-DISC	3	MTUWTHF	43	G	H	BRAUN
	2	F	43	G	H	BRAUN

SPAN 351 PHONETICS.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS. OR 1/2 UNIT

LECT-DISC	10	MTUWTH	133	L	H	ALLEN

COURSES FOR GRADUATES

SPAN 415 SPANISH LITERATURE IN THE SIXTEENTH CENTURY.
1 UNIT

LECT-DISC	9	MTUWTH	133	L	H	ALLEN

SPAN 417 SEVENTEENTH CENTURY LITERATURE.
1 UNIT

LECT-DISC	2	MTUWTH	133	L	H	FLORES

SPAN 434 SPANISH-AMERICAN NOVEL--SOUTH AMERICA.
PREREQUISITE--SPAN. 303 AND 304. OR EQUIVALENT.
1 UNIT

LECT-DISC	1	MTUWTH	133	L	H	LEAL

SPAN 491 SPECIAL TOPICS IN SPANISH.
1/2 OR 1 UNIT

CONF	ARR	STAFF

SPAN 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER--0 TO 2 1/2 UNITS

CONF	ARR	ALLEN. LEAL

SPEECH AND THEATRE

DEPARTMENT OFFICE 138 L H

MAJOR--TWENTY HOURS IN SPEECH IN ADDITION TO SPCH. 101. 105. AND 141. AT LEAST FIVE OF THE TWENTY HOURS MUST BE IN COURSES NUMBERED 300 OR HIGHER. SPCH. 301 MUST BE INCLUDED. IN DECLARING A MAJOR IN SPEECH THE STUDENT MAY CHOOSE ONE OF THESE AREAS FOR EMPHASIS--GENERAL SPEECH. PUBLIC ADDRESS. INTERPRETATION. THEATRE. SPEECH SCIENCE AND PHONETICS. SPEECH CORRECTION AND AUDIOLOGY.
THE STUDENT SHOULD REPORT TO 138 LINCOLN HALL TO BE ASSIGNED AN AREA ADVISER WITH WHOM HE MAY CONFER CONCERNING REQUIRED AND RECOMMENDED COURSES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED WITH THE APPROVAL OF THE STUDENTS MAJOR ADVISER AND HIS DEPARTMENT HEAD. IF TWO MINOR SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE INCLUDED IN EACH.

TWO TEACHER-TRAINING CURRICULA ARE OFFERED IN SPEECH. SEE THE CURRICULUM PREPARATORY TO SPEECH CORRECTION WORK AND THE CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH.

COURSES FOR UNDERGRADUATES

SPCH 101 PRINCIPLES OF EFFECTIVE SPEAKING.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8-10	M W F	136	L H		OLSON
LECT-DISC	B	9	MTUWTH	128	L H		MURPHY
	B	9-11	F	128	L H		
LECT-DISC	C	10	TUWTHF	136	L H		BROADRICK
	C	10-12	M	136	L H		
LECT-DISC	E	1	M WTHF	128	L H		HALL
	E	1-3	TU	128	L H		

SPCH 113 GROUP DISCUSSION AND CONFERENCE LEADERSHIP.
PREREQUISITE--SOPHOMORE STANDING. BY PERMISSION OF THE HEAD OF THE DEPARTMENT THE PREREQUISITE MAY BE WAIVED FOR SUPERIOR STUDENTS, INCLUDING JAMES SCHOLARS.
3 HOURS

LECT-DISC	E	1-3	M W F	262	ARMORY		GULLEY

SPCH 141 ORAL INTERPRETATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
*ONE HOUR TO BE ARRANGED

LECT-DISC	B	*9	MTUWTHF	142	L H		LONG

COURSES FOR ADVANCED UNDERGRADUATES

SPCH 291 HONORS COURSE.
PREREQUISITE--SENIOR STANDING, A GRADE-POINT AVERAGE OF 4.0 OR CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

CONF		ARR					STAFF

SPCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF SPEECH, GRADE-POINT AVERAGE OF 3.75, CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPCH 301 INTRODUCTION TO PHONETICS.
SAME AS LING. 301.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	C	10	MTUWTH	304	L H		HULTZEN
	C	3	TU TH	330	I H		

SPCH 311 BRITISH PUBLIC ADDRESS.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	B	9	MTUWTH	124	L H		MURPHY
	B	3-5	W	124	L H		

SPCH 345 CONTEMPORARY APPROACHES TO ORAL INTERPRETATION.
PREREQUISITE--SPCH. 141 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED
LECT-DISC B *9 MTUWTHF 148 L H SLOAN

SPCH 353 CREATIVE DRAMATICS FOR CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT
LECT-DISC E 1-3 M W F 112 G H

SPCH 355 ADVANCED PLAY DIRECTING.
PREREQUISITE--SPCH. 255 OR EQUIVALENT.
3 HOURS. OR 1/2 OR 1 UNIT
LECT-DISC C 10-12 M W F L H THEATER SWANSON

SPCH 376 SPEECH SCIENCE. II.
SAME AS LING. 376.
PREREQUISITE--SPCH. 375 OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 UNIT
*ONE HOUR TO BE ARRANGED
LECT-DISC B *9 MTUWTHF 104 SP CLINIC ZEMLIN

SPCH 385 SPEECH CORRECTION.
PREREQUISITE--TEN HOURS OF SPEECH OR CONSENT OF INSTRUCTOR.
4 HOURS. OR 1/2 UNIT
LECT-DISC A 8-10 TUWTHF 106 SP CLINIC BENNETT

SPCH 396 DIFFERENTIAL DIAGNOSIS OF HEARING DISORDERS IN YOUNG CHILDREN.
PREREQUISITE--SPCH. 391. 395. OR CONSENT OF INSTRUCTOR.
3 HOURS. OR 1/2 OR 1 UNIT
LECT-DISC ARR 324 I H BYERS

COURSES FOR GRADUATES

SPCH 403 SEMINAR FOR TEACHERS OF SPEECH.
1 UNIT
LECT-DISC ARR BURNS

SPCH 411 THE GREEK TRADITION IN RHETORIC AND ORATORY.
1 UNIT
LECT-DISC ARR NADEAU

SPCH 452 PROBLEMS IN PLAY PRODUCTION IN THE EDUCATIONAL THEATRE.
1 UNIT
LECT-DISC 10-12 TU TH 124 L H SWANSON

SPCH 461 ADVANCED THEATRE TECHNIQUES.
PREREQUISITE--AT LEAST 1 SEMESTER OF GRADUATE STUDY IN THE AREA OF THEATRE. CONSENT OF HEAD OF DEPARTMENT AND OF INSTRUCTOR.
1/2 OR 1 UNIT
LECT-DISC ARR BEHRINGER

SPCH 483 PSYCHOLOGY OF SPEECH AND HEARING DISORDERS. I.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC ARR 106 SP CLINIC ONEILL

SPCH 486 ADVANCED CLINICAL TECHNIQUES IN SPEECH AND HEARING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 4 UNITS
CONF ARR 104 SP CLINIC BYERS AND ONEILL

SPCH 488 DIAGNOSIS OF SPEECH DISORDERS.
1 UNIT
LECT-DISC ARR 104 SP CLINIC NELSON

SPCH 495 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF THE HEAD OF THE DEPARTMENT.
*OPEN TO MASTERS CANDIDATES FOR ONE UNIT. TO DOCTORS CANDIDATES FOR ONE OR TWO UNITS.
*1 OR 2 UNITS
CONF ARR STAFF

SPCH 499 THESIS RESEARCH.
0 TO 4 UNITS. SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

THEORETICAL AND APPLIED MECHANICS

DEPARTMENT OFFICE 212 T L

COURSES FOR UNDERGRADUATES

T A M 150 ANALYTICAL MECHANICS--STATICS.
PREREQUISITE--PHYCS. 101 OR 106. REGISTRATION IN MATH. 142 OR MATH. 143.
2 HOURS
LECT-DISC E 8 MTU THF 313 T L

COURSES FOR ADVANCED UNDERGRADUATES

T A M 211 ANALYTICAL MECHANICS--DYNAMICS.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR MATH. 143.
3 HOURS
LECT-DISC E 9 MTUWTHFS 313 T L

T A M 221 ELEMENTARY MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR MATH. 143.
3 HOURS
LECT-DISC P 10 MTUWTHFS 310 T L

T A M 223 MECHANICAL BEHAVIOR OF SOLIDS.
PREREQUISITE--REGISTRATION IN T.A.M. 221.
1 HOUR
LAB P 3-5 M W 225 T L

T A M 232 FLUID MECHANICS.
PREREQUISITE--T A M 211.
3 HOURS
LECT-DISC E 9 MTUWTHFS 310 T L

T A M 234 FLUID MECHANICS LABORATORY.
PREREQUISITE--REGISTRATION IN T A M 232.
1 HOUR
LAB E 3-5 TU TH 126 T L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

T A M 311 MECHANICAL VIBRATIONS.
PREREQUISITE--T A M 154 OR 156 OR 211 AND 221.
3 HOURS. OR 1/2 OR 1 UNIT
LECT-DISC Z 11 MTUWTHFS 306B T L

T A M 321 ADVANCED MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T A M 221 AND 223 OR 224.
3 HOURS. OR 1/2 OR 1 UNIT
LECT-DISC Z 8 MTUWTHFS 306B T L

T A M 326 EXPERIMENTAL STRESS ANALYSIS.
PREREQUISITE--T A M 150, 211, 221, AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT
LAB Z 10-12 MTU THF 3020 T L

T A M 346 DIMENSIONAL ANALYSIS AND THEORY OF MODELS.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC Z 9 MTUWTHFS 306B T L

COURSES FOR GRADUATES

T A M 441 APPLIED ANALYSIS IN ENGINEERING, I.
PREREQUISITE--MATH. 143.
1 UNIT
LECT-DISC 10 MTUWTHFS 306B T L

T A M 493 ADVANCED INDEPENDENT STUDY--SPECIAL PROBLEMS.
1/2 TO 2 UNITS
CONF ARR

T A M 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR

VETERINARY MEDICAL SCIENCE

DEPARTMENT OFFICE 131 V M

COURSES FOR GRADUATES

V M S 445 ADVANCED MACROSCOPIC PATHOLOGY.
PREREQUISITE--V.M.S. 334, 335 OR EQUIVALENT, AND CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
LAB-DISC ARR V M ALBERTS, SIMON

V M S 459 ADVANCED CORRELATIVE PATHOLOGY.
PREREQUISITE--V.M.S. 335, 308, 361, 445, 450, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
LAB-DISC ARR V M SIMON, WATRACH

V M S 461 ADVANCED VETERINARY PHARMACOLOGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3/4 UNIT
LAB-DISC ARR V M LINK

V M S 492 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT
LAB ARR STAFF

V M S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
LAB ARR STAFF

DEPARTMENT OFFICE 345 N H

MAJOR--TWENTY HOURS IN ZOOLOGY, EXCLUDING ZOOL. 101, 104, 106, AND BIOL. SCI. 100, AND INCLUDING FIVE HOURS OF ADVANCED WORK. ONE YEAR OF PHYSICS AND ONE YEAR OF CHEMISTRY IS REQUIRED OF ALL ZOOLOGY MAJORS. THE COURSES TAKEN IN PHYSICS AND CHEMISTRY MAY BE APPLIED TOWARD A MINOR IN EITHER OF THESE FIELDS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANIMAL SCIENCE, TO BE CHOSEN FROM COURSES 100, 110, 230, 305 OR 330. ANTHROPOLOGY, BOTANY, CHEMISTRY, EDUCATION, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, MATHEMATICS MICROBIOLOGY, PHYSICS, PHYSIOLOGY, AND PSYCHOLOGY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 131 AND 132 MAY BE SUBSTITUTED FOR ZOOL. 101 OR 104 WHEREVER EITHER OF THE LATTER CONSTITUTES A PREREQUISITE.

ZOOL 101 GENERAL ZOOLOGY.
FIELD TRIP.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
#5 HOURS

LECT	8	MTUWTH	434	N H B	STERN, WHITE,
LAB-DISC	9-12	MTUWTH	313	N H B	VERHEY

ZOOL 104 ELEMENTARY ZOOLOGY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
#4 HOURS

LECT	8	MTUWTH	434	N H B	STERN, WHITE,
LAB-DISC	9-12	MTUWTH	315	N H B	VERHEY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ZOOL 302 EXPERIMENTAL ANIMAL PHYSIOLOGY.
SAME AS PHYSL. 302.
PREREQUISITE--ONE YEAR OF COLLEGE LEVEL BIOLOGY, MATHEMATICS AND PHYSICS, CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHF	140	BUR HALL	ANDERSON
LAB	10-12	W	523	BUR HALL	
LAB	9-12	MTU	523	BUR HALL	
DISC	9	W	523	BUR HALL	

ZOOL 303 INDIVIDUAL TOPICS.
PREREQUISITE--TWO YEARS OF ZOOLOGY, SENIOR STANDING, APPROVAL OF DEPARTMENT.
2 TO 5 HOURS, OR 1/2 OR 1 UNIT

CONF	ARR				STAFF

ZOOL 333 VERTEBRATE EMBRYOLOGY.
PREREQUISITE--ZOOL. 132.
5 HOURS, OR 1 UNIT

LECT	1	MTUWTHF	434	N H B	LEONARD,
LAB-DISC	2-5	MTUWTH	323	N H B	CAMPBELL

ZOOL 340 NATURAL HISTORY OF THE VERTEBRATES.
PREREQUISITE--ONE YEAR OF BIOLOGY INCLUDING ZOOL. 101, CONSENT OF INSTRUCTOR.
5 HOURS, OR 1 UNIT

LECT	1	MTUWTH	102C	VIVARIUM	SHOEMAKER
LAB	1-5	F	102B	VIVARIUM	
LAB	8-12	FS	102B	VIVARIUM	

ZOOL 351 GENETICS.
PREREQUISITE--ZOOL. 101, 104, OR ONE SEMESTER OF ANY BIOLOGICAL SCIENCE.
5 HOURS, OR 1 UNIT
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.

LECT		9	MTUWTH	434	N H B		JOHNSON, RAYLE
QUIZ		9	F	434	N H B		
LAB	*A	10-12	MTUWTHF	314	N H B		
LAB	*B	1-3	MTUWTHF	314	N H B		

ZOOL 369 INTRODUCTION TO HUMAN ECOLOGY.
SAME AS GEOG., ANTH., PHYSL., AND SOC. 369.
PREREQUISITE--ONE YEAR OF BIOLOGY AND ONE YEAR OF ANTHROPOLOGY, GEOGRAPHY, GEOLOGY, OR SOCIOLOGY.
*A TERM PAPER IS REQUIRED FOR CREDIT, DEPENDING UPON THE NATURE AND MAGNITUDE OF THIS PAPER THE CREDIT MAY BE 3 OR 5 HOURS.
*3 OR 5 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC		10-12	MTUW	137	D H	SHIMKIN AND OTHERS

COURSES FOR GRADUATES

ZOOL 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS AN. S. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT

LAB		ARR	DZIUK

ZOOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF VERTEBRATES--

VERTEBRATE ANATOMY	BADER, SMITH, BOCK
ENDOCRINOLOGY	HALL, NALBANDOV
HISTOLOGY	ADAMSTONE
ULTRASTRUCTURE	HALL
FUNCTIONAL ANATOMY	BOCK
VERTEBRATE PHYSIOLOGY	PROSSER

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF INVERTEBRATES--

HELMINTHOLOGY	KRUIDENIER
INVERTEBRATE ZOOLOGY	GREENBERG, MATTESON
INVERTEBRATE PHYSIOLOGY	GREENBERG, PROSSER
PARASITOLOGY	KRUIDENIER
PROTOZOOLOGY	CORLISS

EMBRYOLOGY AND BASIC KNOWLEDGE OF CELLS AND TISSUES--

CYTOLOGY	ADAMSTONE, BIRGE, ROSLANSKY
EMBRYOLOGY AND REGENERATION	MOYER, ROSLANSKY, WATTERSON
TOXICOLOGY	INGLE

PRINCIPLES OF ECOLOGY, PRINCIPLES OF TAXONOMY, NATURAL HISTORY--

ECOLOGY	KENDEIGH
ETHOLOGY	BARLOW
HERPETOLOGY	SMITH
ICHTHYOLOGY	SHOEMAKER
LIMNOLOGY	MATTESON
MAMMALOGY	HOFFMEISTER
ORNITHOLOGY	KENDEIGH, BOCK
WILDLIFE MANAGEMENT	KENDEIGH, SCOTT, SHOEMAKER

GENETICS, PHYLOGENY, EVOLUTION--

GENETICS AND EVOLUTION	KITZMILLER, LUCE, NANNEY
VERTEBRATE PHYLOGENY & PALEONTOLOGY	BADER

CONF ARR

TRIAL REGISTRATION FORM

Date.....

Name.....
[Surname first; then given names]

College or School.....

{Urbana-Champaign
{Address.....

Course (or Major).....

Telephone.....

Class.....

Subject (i. e., Department)	Course No.	Sec.	Credit Hours	M	T	W	T	F	S	Memoranda

TRIAL REGISTRATION FORM

Date.....

Name.....
[Surname first; then given names]

College or School.....

{Urbana-Champaign
{Address.....

Course (or Major).....

Telephone.....

Class.....

Subject (i. e., Department)	Course No.	Sec.	Credit Hours	M	T	W	T	F	S	Memoranda

C
IZs1Ia
1964
cop. 3

THE LIBRARY OF THE
MAR 10 1964
UNIVERSITY OF ILLINOIS

JUNE 15 TO AUGUST 8

1964

SUMMER COURSES

BULLETIN · UNIVERSITY OF ILLINOIS · URBANA DEPARTMENTS

UNIVERSITY OF ILLINOIS BULLETIN

Volume 61, Number 55; February, 1964. Published nine times each month by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Office of Publication, 49 Administration Building (West), Urbana, Illinois.

CONTENTS

Calendar....4
General Information....5
Physical Examination....5
Admission and Readmission....6
Registration....7
Fees....9
Financial Aids....9
Final Examinations....10
Student Welfare....11
Room and Board....11
Illini Union....11
CIC Far Eastern Language Institute.13
Listing of Courses....14
Accountancy....15
Advertising....16
Aeronautical and Astronautical Engineering....17
Agricultural Economics....17
Agricultural Engineering....19
Agriculture....20
Agronomy....20
Animal Nutrition....21
Animal Science....20
Anthropology....21
Architecture....23
Art....24
Asian Studies....29
Astronomy....29
Aviation....30
Bands....32
Biophysics....32
Botany....33
Business....34
Business Administration....34
Business Education....35
Business English....123
Business Law....36
Ceramic Engineering....36
Chemical Engineering....41
Chemistry....38
City Planning....42
Civil Engineering....42
Communications....44
Dairy Science....45
Dairy Technology....69
Division of General Studies....45
Economics....46
Education....48
Electrical Engineering....59
English....63
English for Foreign Students....122
Entomology....67
Finance....68
Food Science....69
Forestry....69
French....70
General Engineering....72
Geography....73
Geology....74
German....76
Greek....77
Health Education....78
History....78
Home Economics....80
Horticulture....82
Hygiene....82
Italian....83
Journalism....83
Labor and Industrial Relations....84
Landscape Architecture....84
Latin....84
Latin-American Studies....85
Law....86
Library Science....88
Linguistics....90
Management....91
Marketing....91
Mathematics....92
Mechanical Engineering....97
Metallurgical Engineering....98
Microbiology....98
Mining Engineering....99
Music....99
Nuclear Engineering....107
Philosophy....108
Physical Education....110
Physical Education for Men....109
Physical Education for Women....111
Physics....113
Physiology....114
Plant Pathology....115
Political Science....115
Portuguese....117
Psychology....117
Radio and Television....119
Recreation and Municipal Park Administration....120
Rhetoric and Composition....121
Rural Sociology....18
Russian....124
Safety Education....125
Sociology....126
Spanish....127
Speech and Theatre....129
Theoretical and Applied Mechanics....132
Veterinary Medical Science....133
Zoology....134

CALENDAR FOR EIGHT-WEEK SUMMER SESSION, 1964

May 21, Thurs.-May 22, Fri. . . . . Registration for 1964 Summer Session off-campus courses.

June 1, Mon., 4:40 p.m. . . . . Meeting of Urbana-Champaign Senate.

June 4, Thurs.-June 5, Fri. . . . . Entrance examinations (to remove deficiencies in entrance requirements).

June 15, Mon. . . . . Earliest date for special examinations.

June 15, Mon. . . . . Registration of graduate students not enrolled in the second semester of 1963-64, and undergraduate students.

June 16, Tues., 7:00 a.m. . . . . Instruction begins.

June 16, Tues., 6:45 to 10:00 p.m. . . . Qualifying examination in English (for transfer students with eighty or more credit hours only).

June 16, Tues.-June 17, Wed. . . . . Registration of graduate students enrolled in the second semester of 1963-64.

June 22, Mon., 5:00 p.m. . . . . Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range.

July 4, Sat. . . . . Independence Day (holiday).

July 13, Mon. . . . . Beginning of second four-week courses.

July 14, Tues., 5:00 p.m. . . . . Latest date for refund of one-half tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range.

July 15, Wed. . . . . Earliest date for one-half credit if withdrawing from the University for military service (four weeks completed).

July 16, Thurs., 6:45 to 10:00 p.m. . . . Qualifying examination in English.

July 23, Thurs. . . . . Latest date to withdraw from the University without petitioning for readmission.

July 27, Mon. . . . . Latest date for special examinations.

July 29, Wed. . . . . Earliest date for full credit if withdrawing from the University for military service (six weeks completed).

Aug. 3, Mon. . . . . Latest date for foreign students who have not attended a college or university in the United States to apply for admission in September, 1964.

Aug. 6, Thurs. . . . . Last day of instruction.

Aug. 7, Fri.-Aug. 8, Sat. . . . . Summer Session final examinations.

Aug. 10, Mon.-Sept. 5, Sat. . . . . Corps of Engineers post-Summer Session courses.

Aug. 19, Wed. . . . . Earliest date for special examinations.

Aug. 31, Mon. . . . . Latest date for domestic students, or foreign students who have attended a college or university in the United States, to apply for admission or readmission in September, 1964.

GENERAL INFORMATION

To serve those who desire to pursue summer study, the University of Illinois at Urbana is offering a comprehensive schedule of courses of eight weeks duration, June 15 to August 8, 1964. A few departments are offering special intensive courses lasting only four to six weeks. All colleges on the Urbana campus are included in the summer program.

The University of Illinois Undergraduate Division at Chicago also is offering courses for eight weeks from June 19 to August 14, 1964.

Courses in the eight-week Summer Session are selected to meet the needs of school teachers and administrators, librarians, athletic coaches, and others whose employment prevents attendance during the regular school year, as well as graduate students pursuing work leading to advanced degrees, undergraduate students at the University of Illinois or elsewhere who wish to accelerate their programs of study, and other persons for whom summer study will contribute to vocational or personal goals. The needs of teachers are met not only in the courses and workshops in the College of Education, but also in a variety of courses elsewhere in the University.

Undergraduate and graduate students interested in taking independent study courses (reading and research) should confer with the head of the department concerned.

The resources of the University are open to students throughout the summer. They may take advantage of the extensive facilities of the University Library, the largest in any state university and third among all American universities, with almost 4,700,000 books, films, pamphlets, music scores and parts, maps, manuscripts, and almost 19,000 periodicals and newspapers. They may profit from the museums, collections, shops, and laboratories. There are cultural and recreational opportunities — lectures, readings, concerts, theatre productions, dances, and social events.

General information concerning admission, registration procedures, fees, and board and room is given below. The courses offered in the eight-week Summer Session are listed alphabetically beginning on page 15.

PHYSICAL EXAMINATION

All new students proposing to enroll in the University of Illinois at Urbana-Champaign for a full semester are required, before completion of their first registration, to present adequate evidence of satisfactory physical and mental health as determined by the Director of Health Services.

The pre-entrance examination, except for foreign students, may be performed at the student's expense by a properly qualified doctor of medicine of his choice or by the Health Service free of charge until fifteen days prior to the registration date for the particular semester. It must be performed within the six-month period immediately preceding the registration date and is subject to final evaluation and approval by the Director of Health Services. Detailed explanatory material and medical forms for reporting the pre-entrance examination are forwarded to each student who receives a permit to enter in a fall or spring semester.

New students enrolling in the Summer Session are required to take the tuberculin test administered without charge by the Health Service as part of the registration procedure, but are not required to take the physical examination until such time as they enroll for a full semester. The tuberculin test is also administered during registration to all readmitted students who have been absent for a semester or more. Anyone who has had a normal chest film within the past six months, and presents evidence thereof, is excused from the tuberculin test.

All high school and elementary school students coming to the campus for periods exceeding ten days are required to pass a physical examination, but are not required to take the tuberculin test.

In any particular situation where it is deemed advisable by the Health Service for public health reasons, the physical examination and tuberculin test may be required. All foreign students must pass a physical examination admin-

istered by the University Health Service before receiving a permit to register, and all students who have lived abroad for an academic year or its equivalent are required to have a complete physical examination when returning to reregister in the University.

ADMISSION AND READMISSION

Admission as Candidates for Degrees

All students, *graduate and undergraduate,* not previously enrolled at the University of Illinois who are planning to register for the first time this summer should submit applications for admission to the Dean of Admissions and Records well in advance of June 15, 1964. Application blanks may be obtained by writing to the Office of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois.

Undergraduate students who wish to transfer to the University from another college or university should submit as early as possible the completed application for admission. In addition, if the applicant is to be a candidate for a degree, official high school and college transcripts of record must be sent directly from each institution previously attended.

Candidates for advanced degrees who were registered in the Graduate College for resident study, or in extramural courses as degree candidates, in the 1963 Summer Session or in the first or second semester of 1963-64, *need not apply for readmission to the Summer Session.*

Other former graduate students, and undergraduate students not in attendance the second semester of 1963-64, who expect to return this summer, should file applications for readmission well in advance of registration in order to allow ample time for preparation of registration materials. This will facilitate the entire procedure for each student concerned and avoid unnecessary delay in completing his registration. Those who have not notified the Dean of Admissions and Records in advance of registration day of their intentions to re-enter, and new students who have not received a permit to enter, should go first to the Office of Admissions and Records. Undergraduate students report to 100a Administration Building; graduate students report to 157 Administration Building (West). *They may go there at any time without respect to the alphabetical order of registration on page 8.*

For additional information on any matter concerning admission, write to the Dean of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61803.

Admission of New Undergraduate Students as Candidates for Degrees

Application for admission to the 1964 Summer Session from new undergraduates, as candidates for degrees, whose credentials show that they have met the requirements of the requested curriculum as published in the University Undergraduate Study catalog, are considered as indicated below.

RESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper half of their high school graduating classes.
2. *Freshmen* who rank in the lower half of their high school graduating classes who present one of the following evidences of ability to do satisfactory work at the University:
   a. A passing score on a test, or tests, as prescribed by the All-University Committee on Admissions. (Either the ACT or the SAT of the CEEB have been approved for this purpose, but those presenting SAT scores still must submit ACT scores no later than fifteen days following registration.)
   b. Evidence of having attempted twelve or more semester hours of work at another college or university of recognized standing, and meeting the regular University requirements for admission as a transfer student.
   c. Applying for admission to a session which begins at least twelve months after graduation from high school, provided that (1) in this twelve-month period the applicant has not attempted as much as twelve semester hours

of work at another college or university of recognized standing, and (2) he meets all other University requirements for admission that are applicable to him.

3. *Transfers* who satisfy the scholastic and other requirements specified in the Undergraduate Study catalog.

NONRESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper 50 per cent of their high school graduating classes.
2. *Transfers* whose scholastic averages are at least 3.0 (C).

Minimum requirements are higher in some curricula. Applicants ranking below these minimums are usually not admissible.

Admission and Readmission as Non-Degree Candidates

Applications of undergraduate students for admission or readmission to the Summer Session, not as candidates for degrees, should be submitted to the Office of Admissions and Records well in advance of registration day. They may be approved under one of the following conditions:

1. Former students who were eligible for readmission when they left the University may register in the summer upon approval of the Dean of Admissions and Records.
2. Transfer students who present a statement of eligibility to return to the collegiate institution last attended.
3. Persons employed as teachers who submit statements from the school authorities attesting to their employment.
4. Others, twenty-one or more years of age, who give evidence that they possess the requisite background and ability to pursue profitably summer courses for which they are qualified. They must receive the approval of the Dean of Admissions and Records.

Students admitted to the Summer Session as non-degree candidates who later wish to enter one of the colleges of the University as degree candidates must seek admission at that time in the usual manner from the Office of Admissions and Records.

REGISTRATION

Eight-Week Courses

Monday, June 15, through Saturday, August 8, 1964

No course may be taken for graduate credit unless it is so designated in this Time Table of courses offered. The normal credit which a graduate student can earn in eight weeks is two units. In exceptional cases two and one-half units may be carried with the approval of the adviser. Under no circumstances is a graduate student permitted to carry more than two and one-half units.

Further information concerning the regulations for advanced degrees is contained in the catalog of the Graduate College, copies of which may be obtained by writing to the Dean of Admissions and Records, 100a Administration Building, or the Dean of the Graduate College, 304 Administration Building (East).

REGULAR REGISTRATION

Monday, June 15, 1964

Graduate Students

(*Not* registered on the Urbana campus for the second semester of 1963-64)

The program card and other preliminary registration materials may be obtained in advance of registration day at the department offices on or after Tuesday, June 9. After the preliminary materials have been completed in consultation with the adviser, authorization cards for registration will be distributed in the English Building (enter the northwest door), in accordance with the schedule listed below, *but not before.*

Undergraduate Students

Both new and former Summer Session students not assigned to a college will receive registration forms at the Information Table located inside the northeast entrance of the Armory; other undergraduate students receive registration materials at the offices of the deans of their colleges. Authorization cards to complete registration are released in accordance with the schedule listed below.

Graduate and Undergraduate Students

Nonacademic employees and student registration staff (special permit required) ..... 8:00 a.m.
A through B ..... 10:30 a.m.
C through E ..... 11:00 a.m.
F through G ..... 1:30 p.m.
H through J ..... 2:00 p.m.
K through L ..... 2:30 p.m.
M through O ..... 8:00 a.m.
P through R ..... 8:30 a.m.
S ..... 9:00 a.m.
T through Z ..... 10:00 a.m.

DEFERRED REGISTRATION

Tuesday, June 16, and Wednesday, June 17, 1964

Graduate Students

(Registered on the Urbana campus for the second semester of 1963-64)

Program cards and other preliminary materials should be obtained from the department offices. Authorization cards will be distributed in the English Building (enter the northwest door), according to the following schedule:

A through E ..... Tuesday morning, June 16
F through K ..... Tuesday afternoon, June 16
L through R ..... Wednesday morning, June 17
S through Z ..... Wednesday afternoon, June 17

Registration will be completed in the Armory through Wednesday, June 17, 1964. After June 17, registrations will be completed in the Administration Building. Any registration completed on Thursday, June 18, and thereafter, will be considered a late registration, and the student will be subject to a late registration fine of $15.00 in addition to the usual tuition and fee charges.

Second Four-Week Courses

Monday, July 13, through Saturday, August 8, 1964

Students wishing to register only in courses offered in the second four weeks of the eight-week Summer Session should complete their registration on or before Monday, July 13, 1964.

Directory of Registration Offices

Admissions and Records:
Graduates ..... 157 Administration Building (West)
Undergraduates ..... 100a Administration Building
Agriculture, College of ..... 104 Mumford Hall
Aviation, Institute of ..... 318 Civil Engineering Hall
Commerce and Business Administration, College of ..... 214 David Kinley Hall
Education, College of ..... 105 Gregory Hall
Engineering, College of ..... 119 Civil Engineering Hall
Fine and Applied Arts, College of ..... 110 Architecture Building
Graduate College ..... 304 Administration Building (East)
Journalism and Communications, College of ..... 119 Gregory Hall
Law, College of ..... 209 Law Building
Liberal Arts and Sciences, College of ..... 294 Lincoln Hall

Physical Education, College of:
Men.....107 Huff Gymnasium
Women.....117 Women's Gymnasium
Summer Session.....358 Administration Building (West)
Veterinary Medicine, College of.....135 Veterinary Medicine Building

FEES

All fees are due and payable in full at the time of registration unless the Installment Plan is elected. An additional charge of $2.00 is made for this service. The fees are as follows:

	Full Program		Partial Programs			
	Range I		Range II		Range III	
	Above 5 hours		Above 2½ to 5 hours		Above 0 to 2½ hours	
	Above 1¼ units		Above ¾ to 1¼ units		Above 0 to ¾ unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
Tuition (except those holding exemptions)	$45.00	$130.00	$30.00	$90.00	$20.00	$55.00
Service Fee[1]	20.00	20.00	13.00	13.00	5.00	5.00
Hospital-Medical-Surgical Insurance Fee[2]	5.00	5.00	5.00	5.00	5.00	5.00
Total	$70.00	$155.00	$48.00	$108.00	$30.00	$65.00

Registration in Noncredit Courses (All Campuses)

Students who register in noncredit courses pay tuition fees as follows:

1. Persons registered *on campus* for thesis research only without credit are charged a tuition fee of $10.00 plus a Service Fee of $5.00 and the Hospital-Medical-Surgical Insurance Fee.
2. Persons registered for thesis research *in absentia* without credit are charged only a tuition fee of $10.00.
3. No charge is made for noncredit registrations in seminars, either alone or in addition to other courses.
4. Persons not holding tuition waivers who are registered for less than a full program of credit courses (as defined in the fee schedule) pay $15.00 for each noncredit course in addition to the required tuition and fees for the credit courses. If taken alone, noncredit courses other than thesis research and seminars are assigned to Range III.
5. University employees who register at the request of their department in noncredit courses especially established to improve the work of the employee are not charged for such courses.

The above list of fees includes only those that are generally applicable to all students at Urbana. Complete information concerning fees applicable only in special cases (as change of program after registration, flight instruction fee, visitor's fee, etc.) and fee exemption regulations are contained in the University's Undergraduate Study and the Graduate College catalogs, or may be obtained in Room 105 Administration Building (East) of the Office of Admissions and Records.

FINANCIAL AIDS

Limited amounts of scholarship and loan funds are available for students attending the University in the summer. For detailed information about scholarships, write to the Director of the Undergraduate Scholarship Program, 907 South Sixth Street, Champaign, Illinois 61822. Application blanks and information about loan funds at the University of Illinois in Urbana may be obtained from the office of the Bursar, 100b Administration Building, Urbana, or the offices of the Dean of Men, 110 Student Services Building, or the Dean of Women, 130 Student Services Building, Champaign. Information concerning National Defense Education Act loan funds may be obtained from the office of the Dean of Students, 310 Student Services Building, Champaign, Illinois.

---

[1] Persons on the academic, administrative, or permanent nonacademic staff of the University, or on the staffs of allied agencies, and persons registered *in absentia* or in courses taught off-campus are exempt from the Service Fee.

[2] Students presenting evidence of equivalent coverage may receive a waiver of this fee upon approval of a petition submitted to the University Insurance Office not later than the final day established for full refund of fees. Persons registered for thesis research *in absentia* are not assessed this fee.

FINAL EXAMINATIONS

Eight-Week Courses

Friday, August 7, and Saturday, August 8, 1964

FINAL EXAMINATIONS MUST BE GIVEN AT THE TIMES SPECIFIED UNLESS A CHANGE IS APPROVED *IN ADVANCE* BY THE PROVOST

The examinations for classes meeting four, five, or six times a week are *two hours* in length; those for classes meeting one, two, or three times a week are *one hour* in length. Where it is desired to give a two-hour examination in a course regularly scheduled for a one-hour examination, the time for the examination should be arranged by the instructor at any hour on either of the examination days that will avoid conflicts.

Examinations for courses meeting only once a week, courses meeting at 12:00 noon or after 4:00 p.m., and laboratory or graduate courses, including seminars, also should be arranged by the instructor at any hour within the examination period that will avoid conflicts.

For courses meeting two to six times a week, the schedule of examinations is as follows:

Seven o'clock classes

Meeting four, five, or six times a week.....Friday, 7:00- 9:00 p.m.
Meeting MWF, or any two of those days.....Friday, 7:00- 8:00 p.m.
Meeting TTS, or any two of those days.....Friday, 8:00- 9:00 p.m.

Eight o'clock classes

Meeting four, five, or six times a week.....Friday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Friday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Friday, 11:00-12:00 noon

Nine o'clock classes

Meeting four, five, or six times a week.....Saturday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Saturday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 9:00-10:00 a.m.

Ten o'clock classes

Meeting four, five, or six times a week.....Saturday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Saturday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 11:00-12:00 noon

Eleven o'clock classes

Meeting four, five, or six times a week.....Saturday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 2:00- 3:00 p.m.

One o'clock classes

Meeting four, five, or six times a week.....Friday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Friday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Friday, 9:00-10:00 a.m.

Two o'clock classes

Meeting four, five, or six times a week.....Friday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Friday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Friday, 2:00- 3:00 p.m.

Three o'clock classes

Meeting four, five, or six times a week.....Friday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Friday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Friday, 4:00- 5:00 p.m.

Four o'clock classes

Meeting four, five, or six times a week.....Saturday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 4:00- 5:00 p.m.

Note: For a course so scheduled that the final examination may be given in more than one period, the earliest time in the examination schedule must be chosen. For example, for a course regularly meeting on Monday, Wednesday, and Friday, or any two of these days, 1:00 to 3:00 p.m., the examination should be scheduled for Friday, 8:00 to 9:00 a.m., not Friday, 1:00 to 2:00 p.m.

STUDENT WELFARE

The University makes every effort to provide the most favorable conditions for the life of the student while he is living in the community. The Dean of Students coordinates and unifies the work of the agencies interested in the student's well-being and gives advice and guidance on problems outside the classroom. Advisers and members of the faculty assist students in arranging programs of study and advise them relative to their classroom work. Aptitude testing and counseling services are provided by the Student Counseling Service.

The University Health Service for students, located in McKinley Hospital, 1109 South Lincoln Avenue, Urbana, Illinois, is maintained to promote physical and mental health, to control communicable diseases, and to teach the essentials of healthful living. McKinley Hospital serves both students and faculty.

The office of the Dean of Students maintains an employment service for students who desire part-time employment while attending the University. No charge is made for this service.

The offices of the Dean of Students, Student Employment, and the Student Counseling Service are located in the Student Services Building, 610 East John Street, Champaign, Illinois.

ROOM AND BOARD

During the eight-week Summer Session, housing accommodations in University residence halls will be available in the Pennsylvania Avenue Residence Halls, the newest of the University residence halls. All facilities other than the living units are operated on a coeducational basis with dining, lounge, recreation, library, and office facilities being shared by the men and women residents. All of the shared facilities are air conditioned. Room and board rates for the entire eight-week session are as follows:

	20 Meals per Week	*15 Meals per Week*
Single Room	$220.00	$195.00
Double Room	200.00	175.00

Arrangements may also be made for rooms without board in the Pennsylvania Avenue Residence Halls. Rates for the entire eight-week session are as follows:

Single Room	$100.00
Double Room	80.00

Some residence hall space is available for the use of persons attending University-sponsored short courses or conferences during the summer period. The charge for housing accommodations is $3.00 to $4.25 a person per night and the daily charge for meals is $3.75.

Applications for residence may be obtained from the Housing Division, 420 Student Services Building, Champaign, Illinois.

Rooms, and in some cases, room and board, are also available at privately-operated housing units near the campus. Facilities in housing of this type are listed in the Housing Division Office. Room lists and additional information may be obtained by writing the Housing Division.

ILLINI UNION

The Illini Union is the community center for the students, faculty, staff, and alumni on the Urbana campus of the University of Illinois. In conjunction with

other student organizations, the Illini Union sponsors a broad program of social, cultural, and recreational activities for the students. Among its many facilities are various food service units consisting of a cafeteria, snack bar, dining room, and several banquet rooms. The various lounges are meeting places for students and faculty between classes and at other free times. The Browsing Room contains the latest fiction, biography, and other books for general reading as well as a record-lending library. Programs of recorded classical music are held under the direction of a student committee. Recreational facilities include bowling, billiard tables, television, and rooms for games. Dances are scheduled during the week. All students are entitled to the full use of the facilities of the Illini Union.

ADDITIONAL INFORMATION

For additional information concerning attendance in the Summer Session at the University of Illinois, write to:

Dean of Admissions and Records
University of Illinois
100a Administration Building
Urbana, Illinois 61803

THE CIC FAR EASTERN LANGUAGE INSTITUTE AT INDIANA UNIVERSITY

June 17 through August 14, 1964

The Committee on Institutional Cooperation (CIC), consisting of the universities of "The Big Ten," plus the University of Chicago, offers the second of five rotating Far Eastern Language Institutes at Indiana University.

For qualified University of Illinois undergraduate students who participate in this program, the courses will be exactly as though taken at this University. That is, they will count toward the degree and they will count as residence credit.

The faculty will be drawn from the Chinese and Japanese teaching staffs of the CIC institutions, to whom specialists from universities outside the Big Eleven will be added.

A limited number of grants for scholarships and fellowships will be available for students who show high competence.

During the summer of 1964 intensive courses will be offered in elementary and advanced Chinese and Japanese at the undergraduate and graduate level. University of Illinois graduate students who participate in the program may petition for credit in the usual way if the work taken is at the graduate level.

Students desiring further information concerning these courses or forms of financial aid connected with the program should see Dean C. P. Viens, 294 Lincoln Hall.

LISTING OF COURSES

The following time table of summer courses offered by the University is subject to whatever changes may prove necessary at registration time. Notices of all changes in time or place of meeting of classes will be supplied to advisers for checking program cards during registration. Names of instructors are listed subject to their acceptance of appointment for summer service.

Arrangement

The arrangement of subjects in this time table is alphabetical. The courses offered in each subject are listed numerically with headings to indicate the students for whom they are designed. Courses for undergraduates (designed for freshmen and sophomores) are numbered 100 to 199; for advanced undergraduates (designed for juniors and seniors), 200 to 299; for advanced undergraduates and graduates (junior, senior, or graduate standing required), 300 to 399; for graduates, 400 to 499. Following the title of each course is a statement of the requirements, if any, for admission to the course.

Class periods for each course are indicated by numerals for the hours of the day and by letters for the days of the week. For example, "8-10 MWF" indicates that the class period begins at 8:00 a.m. and continues for two hours on Monday, Wednesday, and Friday; while "11 TTS" means that the class period begins at 11:00 a.m. and continues for fifty minutes on Tuesday, Thursday, and Saturday. The place of meeting of each class is shown by the number of the room and the name of the building.

Credit

Credit is counted in semester hours for undergraduates and in units for graduates, as shown in the description of each course.

Students having ninety or more hours of credit, without regard to the division in which they may be enrolled, are classified as seniors for the purpose of designating those freshman courses which, when taken by seniors or graduate students, carry reduced credit.

Some courses have variable credit, as 3 to 5 hours or ½ to 2 units, and in registering for a course with variable credit each student puts on his program card the number of hours or units for which he intends to take the course.

Buildings

University buildings are designated by the following abbreviations:

Aeronautical Engineering Laboratory	Aero Lab
Agricultural Engineering Building	Agr Eng
Altgeld Hall	AH
Animal Genetics Building	An Gen
Animal Sciences Laboratory	ASL
Architecture Building	Arch
Bevier Hall	Bev Hall
Burnsides Research Laboratory	BRL
Burrill Hall	Bur Hall
Ceramics Building	Cer
Chemistry Annex	CA
Child Development Laboratory	CD
Civil Engineering Hall	CEH
Commerce Annex	Com Annex
Dairy Manufactures Building	DMB
Davenport Hall	DH
David Kinley Hall	DKH
East Chemistry Building	EC
Education Project and Guidance Building	EPGB
Electrical Engineering Annex	EE Annex
Electrical Engineering Building	EEB
Elementary Education Center	EEC
English Building	EB
Fine and Applied Arts Building	FAB
Floriculture Building	Flor
Foundry and Pattern Laboratory	Fdy & Pat Lab
Gregory Hall	GH
Harker Hall	HH
Hill Annex	HA
Horticulture Field Laboratory	HFL
Huff Gymnasium	HG
Hydraulic Engineering Laboratory	Hyd Eng Lab
Illini Hall	IH
Krannert Art Museum	KM
Labor and Industrial Relations Building	ILIR
Law Building	Law
Library	Lib
Lincoln Hall	LH
Mechanical Engineering Building	MEB
Mechanical Engineering Laboratory	MEL
Men's Old Gymnasium	MOG
Metallurgy and Mining Building	MMB
Mining and Metallurgy Laboratory	Met Lab
Morrill Hall	Mor Hall
Mumford Hall	MH
Natural History Building	NHB
Noyes Laboratory of Chemistry	NL
Observatory	Observ
Physics Building	PB
Practice Annex	PA
Quonset	Q
Rural Electric Laboratory	RE Lab
Smith Music Hall	SMH
Speech Clinic	Sp Clinic
Stiven House	SH
Stock Judging Pavilion	SP
String Annex	SA
Student Rehabilitation Center	Rehab Center
Surveying Building	Surv Bldg
Talbot Laboratory	TL
Theory Annex	TA
Transportation Building	TB
Turner Hall	TH
University High School	UHS
Vegetable Crops Building	Veg Crops
Veterinary Clinic, Large Animal	VCLA
Veterinary Clinic, Small Animal	VCSA
Veterinary Medicine Building	VM
Women's Gymnasium	W Gym

ACCOUNTANCY

DEPARTMENT OFFICE 321 D K H

COURSES FOR UNDERGRADUATES

ACCY 101 PRINCIPLES OF ACCOUNTING I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
LECT-DISC A 8 MTUWTHFS 113 D K H

ACCY 105 PRINCIPLES OF ACCOUNTING II.
PREREQUISITE--ACCY. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
LECT-DISC A 8 MTUWTHFS 215 D K H PETERSON

ACCY 106 ELEMENTARY COST ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
LECT-DISC C 10 MTUWTHFS 317A D K H DICKEY

ACCY 108 INTERMEDIATE ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
LECT-DISC C 10 MTUWTHFS 113 D K H

COURSES FOR ADVANCED UNDERGRADUATES

ACCY 201 FUNDAMENTALS OF ACCOUNTING.
A SURVEY COURSE FOR NON-COMMERCE STUDENTS ONLY.
3 HOURS
LECT-DISC B 9 MTUWTHFS 113 D K H SCHLOSSER

ACCY 274 BASIC FEDERAL INCOME TAX ACCOUNTING.
PREREQUISITE--ACCY. 108.
3 HOURS
LECT-DISC B 9 MTUWTHFS 122 D K H CLARKE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ACCY 308 ADVANCED ACCOUNTING.
PREREQUISITE--ACCY. 106 AND 108, AN AVERAGE OF C OR BETTER IN PRECEDING COURSES IN ACCOUNTANCY.
3 HOURS, OR 3/4 UNIT
LECT-DISC D 11 MTUWTHFS 115 D K H PERRY

ACCY 371 AUDITING.
PREREQUISITE--ACCY. 308.
3 HOURS, OR 3/4 UNIT
LECT-DISC D 11 MTUWTHFS 317 D K H SCHLOSSER

ACCY 372 AUDITING PROBLEMS AND CASES.
PREREQUISITE--ACCY. 371.
3 HOURS, OR 3/4 UNIT
LECT-DISC D 11 MTUWTHFS 215 D K H ZIMMERMAN

ACCY 377 ADVANCED PROBLEMS.
PREREQUISITE--SENIOR STANDING, CREDIT OR REGISTRATION IN ACCY. 371.
3 HOURS, OR 1 UNIT
LECT-DISC C 10 MTUWTHFS 317 D K H PETERSON

COURSES FOR GRADUATES

ACCY 466 COST ACCOUNTING THEORY AND ANALYSIS.
1 UNIT
LECT-DISC 8-10 W S 317A D K H DICKEY

ACCY 481 CONCEPTS AND PRINCIPLES.
1 UNIT
LECT-DISC 8-10 M TH 317A D K H BEDFORD

ACCY 483 INCOME DETERMINATION.
1 UNIT
LECT-DISC 8-10 M TH 317 D K H PERRY

ACCY 489 HISTORY OF ACCOUNTING THEORY.
1 UNIT
LECT-DISC 8-10 TU F 317A D K H ZIMMERMAN

ACCY 493 SPECIAL RESEARCH PROBLEMS.
1/4 TO 2 UNITS
CONF ARR BEDFORD

ACCY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
M. S. CANDIDATES SHOULD REGISTER IN SECTION S1, AND PH. D.
CANDIDATES IN SECTION S2.
DISC S1 2-4 M 420 D K H BEDFORD
DISC S2 2-4 M 420 D K H BEDFORD

ADVERTISING

DEPARTMENT OFFICE 120A G H

COURSES FOR ADVANCED UNDERGRADUATES

ADV 281 INTRODUCTION TO ADVERTISING.
*CREDIT IS NOT GIVEN FOR BOTH ADV. 281 AND MKTG. 287.
*3 HOURS
LECT-DISC C 10 MTUWTHFS 43 G H MOYER

ADV 388 ADVERTISING IN CONTEMPORARY SOCIETY.
SAME AS MKTG. 388.
PREREQUISITE--ADV. 281 OR MKTG. 287 OR CONSENT OF INSTRUCTOR.
*GRADUATE STUDENTS MAY NOT RECEIVE CREDIT FOR BOTH ADV. 388 AND 481.
*2 HOURS, OR 1/2 UNIT
LECT-DISC D 11 MTUWTH 123 G H MOYER

COURSES FOR GRADUATES

ADV 490 SPECIAL TOPICS IN ADVERTISING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 OR 1 UNIT
CONF ARR STAFF

ADV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN ADVERTISING.
1 OR 2 UNITS
CONF ARR STAFF

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

DEPARTMENT OFFICE 101 T B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

A A E 391 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC A ARR STAFF

COURSES FOR GRADUATES

A A E 493 SPECIAL PROBLEMS.
1 OR 2 UNITS
CONF A ARR STAFF

A A E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF A ARR STAFF

AGRICULTURAL ECONOMICS
INCLUDING RURAL SOCIOLOGY

AGRICULTURAL ECONOMICS

DEPARTMENT OFFICE 305 M H

COURSES FOR ADVANCED UNDERGRADUATES

AG EC 200 PROBLEMS IN AGRICULTURAL ECONOMICS.
PREREQUISITE--MINIMUM GRADE-POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE AND/OR THIRD SPECIAL PROBLEM COURSE IN ADVANCE OF REGISTRATION.
3 TO 5 HOURS
A--AGRICULTURAL MARKETING
BARTLETT, BRINEGAR, BROADBENT, HIERONYMUS
JUDGE, KELLY, MUTTI, ROUSH, SCHMIDT
B--AGRICULTURAL PRICES AND STATISTICAL ANALYSIS
JUDGE
C--FARM MANAGEMENT AND LAND ECONOMICS
BAKER, BUDDEMEIER, DOVRING, HEADLEY,
HERBST, HOLCOMB, REISS,
SWANSON, THOMPSON, WILLS
D--RURAL ORGANIZATION FOLSE, LINDSTROM
E--AGRICULTURAL LAW KRAUSZ
F--AGRICULTURAL POLICY HALCROW, SCHMIDT, SPITZE, THOMPSON
G--AGRICULTURAL FINANCE BAKER, HOLCOMB, SPITZE
CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG EC 302 FINANCING AGRICULTURE.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 16 TO JULY 11.
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.
LECT-DISC *C 10-12 MTUWTHF 316S M H BAKER

AG EC 332 LIVESTOCK MARKETING.
SAME AS AN. S. AND MKTG. 332.
PREREQUISITE--ECON. 108, AG. EC. 230 OR MKTG. 101.
FIELD TRIP, ESTIMATED EXPENSE, $10.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	MTUW F	316S M H	BROADBENT
	A	7-9	TH	316S M H	

COURSES FOR GRADUATES

AG EC 491 SEMINAR AND SPECIAL TOPICS.
EACH GRADUATE STUDENT WHOSE MAJOR IS AGRICULTURAL ECONOMICS MUST REGISTER IN THIS COURSE.
*ONLY STUDENTS WHO REGISTER FOR CREDIT AND COMPLETE SPECIAL STUDIES UNDER DIRECTION OF ONE OR MORE STAFF MEMBERS WILL RECEIVE CREDIT.
*0 TO 2 UNITS

LECT-DISC	3	W	405 M H	STAFF

AG EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

RURAL SOCIOLOGY
DEPARTMENT OF AGRICULTURAL ECONOMICS.

COURSES FOR ADVANCED UNDERGRADUATES

R SOC 277 RURAL SOCIAL CHANGE.
SAME AS SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

LECT-DISC	B	9	MTUWTHF	316S M H	FOLSE
	B	7	TU	316S M H	

COURSES FOR GRADUATES

R SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS--JUNE 16 TO JULY 11.

LECT-DISC	1-3	MTUWTH	316S M H	LINDSTROM

R SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

CONF	ARR	STAFF

AGRICULTURAL ENGINEERING

DEPARTMENT OFFICE 206A AGR ENG

NOTE COURSES IN AGRICULTURAL ENGINEERING FOR NON-ENGINEERING STUDENTS ARE 242, 300, 361. COURSE FOR ENGINEERING STUDENTS IS 396.

COURSES FOR ADVANCED UNDERGRADUATES

AG E 242 GASOLINE, LIQUIFIED PETROLEUM GAS, AND DIESEL TRACTORS.
PREREQUISITE--AG. E. 112.
3 HOURS
FIRST FOUR WEEKS JUNE 16-JULY 11.

LECT	A	8-10	M W F	132	AGR ENG	YOERGER
	A	8	TU TH	132	AGR ENG	
LAB		3-5	MTU THF	TRACTOR LAB		

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 300 SPECIAL PROBLEMS.
PREREQUISITE--NONENGINEERING STUDENT, MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND SPECIAL PROBLEMS COURSE.
3 HOURS, OR 1/2 UNIT

CONF		ARR				STAFF

AG E 361 DEVELOPMENT AND FUNCTION OF FAMILY HOUSING.
SAME AS H. EC. 361.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS JUNE 16-JULY 11.

LECT-DISC		8-11	M W F	218	AGR ENG	HANSEN
LAB		8-11	TU TH	202	AGR ENG	

AG E 396 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING.
3 HOURS, OR 1/2 UNIT

CONF		ARR				STAFF

COURSES FOR GRADUATES

AG E 496 PROBLEMS IN AGRICULTURAL ENGINEERING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1 UNIT

CONF		ARR				STAFF

AG E 499 THESIS RESEARCH.
1 TO 2 UNITS

CONF		ARR				STAFF

AGRICULTURE

COURSES FOR ADVANCED UNDERGRACUATES

AGR 208 COOPERATIVE EXTENSICN WORK--SUMMER TRAINING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

CONF	ARR				ANDERSON

AGRONOMY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AGRON 301 SOIL SURVEY, WITH EMPHASIS CN ILLINOIS SOILS.
PREREQUISITE--AGRON. 101.
FIELD TRIPS, ESTIMATED EXPENSE $10.
*CREDIT IS NOT GIVEN TOWARD PH.D. FOR MAJOR CR SOLE MINOR IN AGRONOMY-SOILS.
*3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 16 TO JULY 11.

LECT	1-3	MTUWTHF	W223	T H	ODELL
LAB	3-5	W	W223	T H	

ANIMAL SCIENCE
INCLUDING ANIMAL NUTRITION

DEPARTMENT OFFICE 328 M H

COURSES FCR ADVANCED UNDERGRADUATES

AN S 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATICN FCR A SECOND AND/CR THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS

LAB	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AN S 303 PORK PRODUCTION.
PREREQUISITE--AN.S. 102 OR 220.
3 HOURS, OR 3/4 UNIT
FIRST FOUR WEEKS--JUNE 16-JULY 11.

LECT	8-10	MTUWTHF	316	M H	HARMON
	7-9PM	W	316	M H	

AN S 332 LIVESTOCK MARKETING.
SAME AS AG. EC. AND MKTG. 332.
PREREQUISITE--ECON. 108, AG. EC. 230, OR MKTG. 101.
FIELD TRIP, ESTIMATED EXPENSE $10.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	MTUW F	316S	M H	BROADBENT
	A	7-9	TH	316S	M H	

COURSES FOR GRADUATES

AN S 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ZOOL. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*COMBINED CREDIT IN AN.S. 407 AND 408 MAY NOT EXCEED TWO UNITS.
1/2 TO 1 UNIT

LAB	ARR		NALBANDOV

AN S 410 RESEARCH METHODS IN ANIMAL SCIENCE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/4 TO 1 UNIT

CONF	ARR		BECKER, BREIDENSTEIN, GARRIGUS, NEUMANN, SCOTT

AN S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR		GRADUATE STAFF

ANIMAL NUTRITION
DIVISION OF DEPARTMENT OF ANIMAL SCIENCE

DIVISION OFFICE 120 A S L

COURSES FOR GRADUATES

AN NU 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

DISC	ARR		GRADUATE STAFF

ANTHROPOLOGY

DEPARTMENT OFFICE 137 D H

MAJOR--TWENTY HOURS FROM ANY COURSE IN ANTHROPOLOGY, INCLUDING ANTHROP. 102 AND 103. A DOUBLE MAJOR IN ANTHROPOLOGY AND SOCIOLOGY IS NOT PERMITTED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ECONOMICS, GEOGRAPHY, HISTORY, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND ZOOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES OR IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A SOLE MINOR.
NOTE--INDIVIDUAL INSTRUCTION WILL BE AVAILABLE FOR EDMUND J JAMES SCHOLARS.

COURSES FOR UNDERGRADUATES

ANTH 103 INTRODUCTION TO CULTURAL ANTHROPOLOGY.
*CREDIT IS NOT GIVEN FOR BOTH ANTH. 103 AND SOC. 104.
*4 HOURS
*HONORS SECTION OPEN TO JAMES SCHOLARS AND OTHER HONORS STUDENTS.

LECT		10-12	MTUW	313	D H	BRUNER
QUIZ	A	10-12	TH	313	D H	
QUIZ	B	10-12	F	313	D H	
QUIZ	C	8-10	F	313	D H	

COURSES FOR ADVANCED UNDERGRADUATES

ANTH 290 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS
CONF A ARR BRUNER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ANTH 354 FIELD TECHNIQUES IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT
CONF A ARR MCGREGOR

ANTH 355 LABORATORY TECHNIQUES AND PROBLEMS IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT
LAB-DISC A ARR MCGREGOR

ANTH 364 FIELD WORK IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED. CONCURRENT REGISTRATION IN ANTH. 365, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT
CONF A ARR CASAGRANDE

ANTH 365 ANALYSIS OF FIELD DATA IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT
CONF A ARR CASAGRANDE

ANTH 371 CULTURE AND PERSONALITY.
PREREQUISITE--AN INTRODUCTORY COURSE IN ANTHROPOLOGY, SOCIOLOGY OR PSYCHOLOGY, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC A 1-3 MTUW 313 D H BRUNER

COURSES FOR GRADUATES

ANTH 490 INDIVIDUAL TOPICS IN ANTHROPOLOGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
CONF A ARR BRUNER

ANTH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS
CONF *A ARR STAFF
CONF *B ARR

ARCHITECTURE

DEPARTMENT OFFICE 106 ARCH

IN THE CURRICULUM IN ARCHITECTURE, NORMAL COURSE PROGRESS IN SEQUENCE IS IMPERATIVE. STUDENTS FAILING TO COMPLETE ANY REQUIRED COURSE MORE THAN ONE SEMESTER LATER THAN THE TIME DESIGNATED IN THE CURRICULUM, ARE PROHIBITED FROM PROGRESSIVE REGISTRATION IN ARCHITECTURAL COURSES UNTIL THE DEFICIENCY IS CORRECTED. APPLICABLE TO STUDENTS ENTERING IN SEPTEMBER, 1958.

COURSES FOR ADVANCED UNDERGRADUATES

ARCH 215 HISTORY OF RENAISSANCE AND BAROQUE ARCHITECTURE.
PREREQUISITE--ARCH. 214 OR CONSENT OF INSTRUCTOR.
3 HOURS

LECT	8	MTUWTHFS	120 ARCH	PUNDT

ARCH 233 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 132, CREDIT OR REGISTRATION IN T A M 150 OR 171, REGISTRATION IN ARCH 241.
3 HOURS

LAB	9-12	MTUWTHFS	206A F A B	EXLINE

ARCH 234 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 233.
3 HOURS

LAB	9-12	MTUWTHFS	206B F A B	EXLINE

ARCH 235 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 234. REGISTRATION IN ARCH. 265.
5 HOURS

LAB	8-12	M W F	206C F A B	MARFORT
LAB	1-5	M W F	206C F A B	MARFORT
LAB	1-4	TU TH	206C F A B	MARFORT

ARCH 236 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 235 AND 265.
5 HOURS

LAB	8-12	M W F	206D F A B	MARFORT
LAB	1-5	M W F	206D F A B	MARFORT
LAB	1-4	TU TH	206D F A B	MARFORT

ARCH 241 MATERIALS AND METHODS OF CONSTRUCTION, III.
PREREQUISITE--ARCH. 142. REGISTRATION IN ARCH. 233.
2 HOURS

LECT	2-4	TU TH	302 ARCH	HODGE

ARCH 247 STRUCTURAL PLANNING.
PREREQUISITE--ARCH. 257.
3 HOURS

LECT-DISC	10-12	TU TH S	302 ARCH	BRIGHTBILL

COURSES FOR GRADUATES

ARCH 493 SPECIAL PROBLEMS IN STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
*SECTION SP--STRUCTURAL PLANNING.

LECT-DISC *SP1	8-10	MTUWTH	4E ARCH	TANG
LECT-DISC *SP2	10-12	MTUWTH	4E ARCH	TANG

ARCH 494 SPECIAL PROBLEMS IN ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 435.
1/2 TO 2 UNITS
LAB 8-5 MTUWTHF 229 F A B KEITH

ARCH 496 ARCHITECTURAL HISTORQC
PREREQUISITE--ARCH. 417 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
CONF ARR PUNDT

ART

DEPARTMENT OFFICE 143 FAB

COURSES IN ART APPRECIATION AND THE HISTORY OF ART.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 319 ITALIAN ART OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES.
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
LECT A 8 MTUWTHFS 62 K M PINNELL

STUDIO COURSES PRIMARILY FOR NON-ART STUDENTS

ART 101 WATER COLOR, I.
PREREQUISITE--FOR ART STUDENTS, ART 118 AND 120. FOR OTHERS,
CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 1-5 M W F 209 F A B STAFF

ART 102 WATER COLOR, II.
PREREQUISITE--ART 101.
2 HOURS
LAB A 1-5 M W F 209 F A B STAFF

ART 105 INTRODUCTION TO WATER CCLOR PAINTING.
NOT OPEN TO STUDENTS MAJCRING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS CREDIT.
*2 HOURS
LAB A 1-5 M W F 209 F A B STAFF

ART 106 INTRODUCTION TO OIL PAINTING.
NOT OPEN TO STUDENTS MAJCRING IN ART.
*STUDENTS MAY ACCUMULATE FCUR HOURS.
*2 HOURS
LAB A 9-1 M W F 9 F A B JACKSON

ART 107 ELEMENTARY DRAWING.
FOR STUDENTS NOT MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FCUR HOURS.
*2 HOURS
LAB A 1-5 M W F 236 F A B STAFF

COURSES FOR UNDERGRADUATES

ART 117 DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
3 HOURS
LAB A 10-1 MTUWTHFS 236 F A B LYNCH

ART 118 DRAWING, II.
PREREQUISITE--ART 117. OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
2 HOURS
LAB A 10-12 MTUWTHFS 240 F A B LYNCH

ART 119 DESIGN, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
2 HOURS
LAB A 8-10 MTUWTHFS 327 F A B ROY

ART 120 DESIGN, II.
PREREQUISITE--ART 119. OPEN ONLY TO STUDENTS IN COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
3 HOURS
LAB A 7-10 MTUWTHFS 327 F A B ROY

ART 121 DRAWING THEORY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS
LAB A 2-5 MTUWTH 235 F A B WALLACE

ART 122 DRAWING THEORY.
PREREQUISITE--ART 121.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS
LAB A 2-5 MTUWTH 237 F A B WALLACE

ART 125 LIFE DRAWING, I.
PREREQUISITE--ART 118.
2 HOURS
LAB A 2-5 MTUWTH 336 F A B TRAINOR

ART 126 LIFE DRAWING, II.
PREREQUISITE--ART 125.
2 HOURS
LAB A 2-5 MTUWTH 336 F A B TRAINOR

ART 131 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 118, 120.
2 HOURS
LAB A 9-1 TU TH S 209 F A B STAFF

ART 132 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 131.
2 HOURS
LAB A 9-1 TU TH S 209 F A B STAFF

ART 141 STILL LIFE, I.
PREREQUISITE--ART 118, 120.
2 HOURS
LAB A 9-1 M W F 9 F A B JACKSON

ART 142 STILL LIFE, II.
PREREQUISITE--ART 141.
2 HOURS
LAB A 9-1 M W F 9 F A B JACKSON

ART 150 SCULPTURE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 9-1 TU TH S 25 F A B STAFF

ART 151 SCULPTURE, I.
PREREQUISITE--ART 118, 120.
2 HOURS
LAB A 9-1 TU TH S 25 F A B STAFF

ART 152 SCULPTURE, II.
PREREQUISITE--ART 151.
2 HOURS
LAB A 9-1 TU TH S 25 F A B STAFF

ART 181 FREEHAND DRAWING, I.
2 HOURS
LAB A 1-5 M W F 236 F A B STAFF

ART 182 FREEHAND DRAWING, II.
PREREQUISITE--ART 181. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS
LAB A 1-5 M W F 240 F A B STAFF

ART 183 FREEHAND DRAWING, III.
PREREQUISITE--ART 182. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS
LAB A 1-5 M W F 209 F A B STAFF

ART 184 FREEHAND DRAWING, IV.
PREREQUISITE--ART 183. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS
LAB A 1-5 M W F 209 F A B STAFF

ART 190 RECREATIONAL CRAFTS, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
2 HOURS
LAB A 2-5 TUWTHF 106 F A B LUMSDEN

ART 191 RECREATIONAL CRAFTS, II.
PREREQUISITE--ART 190. PRIMARILY FOR RECREATION MAJORS IN
PHYSICAL EDUCATION.
2 HOURS
LAB A 2-5 TUWTHF 106 F A B LUMSDEN

ART 192 METALWORK AND JEWELRY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 9-12 M W FS 24 D K H FRITH

ART 193 METALWORK AND JEWELRY, II.
PREREQUISITE--ART 192.
2 HOURS
LAB A 9-12 M W FS 24 D K H FRITH

ART 194 POTTERY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LAB A 9-12 TU THFS 23 D K H FRITH

ART 195 POTTERY, II.
PREREQUISITE--ART 194.
2 HOURS
LAB A 9-12 TU THFS 23 D K H FRITH

ART 203 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS

LAB	A	2-5	TUWTHF	106	F A B	LUMSDEN

ART 204 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS

LAB	A	2-5	TUWTHF	106	F A B	LUMSDEN

ART 225 INTERMEDIATE DRAWING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS

LAB	A	2-5	MTUWTH	338	F A B	TRAINOR

ART 226 INTERMEDIATE DRAWING, II.
PREREQUISITE--ART 225.
2 HOURS

LAB	A	2-5	MTUWTH	338	F A B	TRAINOR

ART 231 INTERMEDIATE COMPOSITION, I.
PREREQUISITE--ART 132.
3 HOURS

LAB	A	2-6	M W F	308	F A B	FOSTER
	A	2-5	TU TH	308	F A B	FOSTER

ART 232 INTERMEDIATE COMPOSITION, II.
PREREQUISITE--ART 231.
3 HOURS

LAB	A	2-6	M W F	308	F A B	FOSTER
	A	2-5	TU TH	308	F A B	FOSTER

ART 243 FIGURE PAINTING, I.
PREREQUISITE--JUNIOR STANDING IN ART
2 HOURS

LAB	A	2-6	M W F	318	F A B	FOSTER

ART 244 FIGURE PAINTING, II.
PREREQUISITE--ART 243.
2 HOURS

LAB	A	2-6	M W F	318	F A B	FOSTER

ART 251 ADVANCED SCULPTURE, I.
PREREQUISITE--ART 152.
2 HOURS

LAB	A	9-1	TU TH S	25	F A B	STAFF

ART 252 ADVANCED SCULPTURE, II.
PREREQUISITE--ART 251.
2 HOURS

LAB	A	9-1	TU TH S	25	F A B	STAFF

ART 261 LAYOUT AND LETTERING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

LAB	A	9-12	MTUWTHFS	311	F A B	STERKEL

ART 262 LAYOUT AND LETTERING, II.
PREREQUISITE--ART 261.
3 HOURS

LAB	A	9-12	MTUWTHFS	311	F A B	STERKEL

ART 265 ADVERTISING DESIGN, I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

LAB	A	9-12	MTUWTHFS	319	F A B	STERKEL

ART 266 ADVERTISING DESIGN, II.
PREREQUISITE--ART 265.
3 HOURS

LAB	A	9-12	MTUWTHFS	319	F A B		STERKEL

ART 275 INDUSTRIAL DESIGN, I.
PREREQUISITE--ART 134.
FIELD TRIP REQUIRED.
3 HOURS

LAB	A	2-6	M W F	40	F A B		ZAGORSKI
	A	2-5	TU TH	40	F A B		ZAGORSKI

ART 276 INDUSTRIAL DESIGN, II.
PREREQUISITE--ART 275.
FIELD TRIP REQUIRED.
3 HOURS

LAB	A	2-6	M W F	40	F A B		ZAGORSKI
	A	2-5	TU TH	40	F A B		ZAGORSKI

ART 281 FREEHAND DRAWING, V.
PREREQUISITE--ART 184.
2 HOURS

LAB	A	1-5	M W F	311	F A B		STAFF

ART 282 FREEHAND DRAWING, VI.
PREREQUISITE--ART 281.
2 HOURS

LAB	A	1-5	M W F	311	F A B		STAFF

ART 292 INTRODUCTION TO METAL DESIGN IN JEWELRY.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

LAB	A	9-12	M W FS	24	D K H		FRITH

ART 293 DEVELOPMENT OF METAL DESIGN IN JEWELRY.
PREREQUISITE--ART 292.
3 HOURS

LAB	A	9-12	M W FS	24	D K H		FRITH

ART 294 CERAMIC DESIGN, I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

LAB	A	9-12	TU THFS	23	D K H		FRITH

ART 295 CERAMIC DESIGN, II.
PREREQUISITE--ART 294.
3 HOURS

LAB	A	9-12	TU THFS	23	D K H		FRITH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 332 DRAWING.
PREREQUISITE--ART 126 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE.
2 HOURS, OR 1/2 TO 1 UNIT

LAB	A	2-5	MTUWTH	338	F A B		TRAINOR

ART 333 PAINTING.
PREREQUISITE--ART 142 OR EQUIVALENT, FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M. F. A. IN PAINTING.
*COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS.
*2 HOURS, OR 1/2 TO 1 UNIT

LAB	A	2-6	M W F	318	F A B		FOSTER

COURSES FOR GRADUATES

ART 491 SPECIAL PROBLEMS.
1/2 TO 2 UNITS
LAB A 2-5 MTUWTH GRAD STUDIO DIETEMANN

ART 493 SEMINAR.
1 UNIT
CONF A ARR 140 F A B PINNELL

ART 495 PAINTING LABORATORY.
1/2 TO 2 UNITS
LAB A 2-5 MTUWTH GRAD STUDIO DIETEMANN

ASIAN STUDIES

DEPARTMENT OFFICE 109 L I R

STUDENTS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF EAST, SOUTHEAST, SOUTH, AND MIDDLE EAST ASIAN AFFAIRS AND CULTURES ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE CHAIRMAN AND MEMBERS OF THE ASIAN STUDIES PROGRAM COMMITTEE IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. THE CHAIRMAN IS PROFESSOR SOLOMON B. LEVINE, INSTITUTE OF LABOR AND INDUSTRIAL RELATIONS, ROOM 109.

BELOW ARE LISTED COURSES IN THE ASIAN STUDIES AREAS WHICH ARE BEING OFFERED THIS TERM. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.

ECON 210
HIST 307

ASTRONOMY

DEPARTMENT OFFICE 108A OBSERVATORY

MAJOR--TWENTY HOURS IN ASTRONOMY.

MINOR--TWENTY HOURS WHICH MUST INCLUDE PHYSICS 106, 107, AND 108. THE REMAINING EIGHT HOURS MAY BE TAKEN IN PHYSICS OR IN ONE OF THE FOLLOWING SUBJECTS--CHEMISTRY, GEOLOGY, MATHEMATICS, PHILOSOPHY. IF TWO SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

INDIVIDUAL INSTRUCTION IS PROVIDED FOR SUPERIOR UNDERGRADUATE STUDENTS AT HOURS TO BE ARRANGED.

COURSES FOR GRADUATES

ASTR 499 THESIS RESEARCH
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

AVIATION

DEPARTMENT OFFICE 318 C E H

COURSES OFFERED BY THE INSTITUTE OF AVIATION ARE OPEN TO STUDENTS AND FACULTY IN ALL DEPARTMENTS OF THE UNIVERSITY, SUBJECT TO LIMITATIONS IMPOSED BY THE AVAILABILITY OF SPACE AND EQUIPMENT. CREDIT FOR INSTITUTE OF AVIATION COURSES IS GENERAL UNIVERSITY CREDIT. HOWEVER, ITS USE AS CREDIT TOWARD GRADUATION IS A MATTER FOR EACH COLLEGE TO PASS UPON. COURSES IN THE 150, 160, AND 170 SERIES ORDINARILY GIVE CREDIT ONLY IN THE INSTITUTE OF AVIATION.

THE FEE FOR EACH INSTITUTE OF AVIATION FLIGHT COURSE IS $350. BUS TRANSPORTATION TO AND FROM THE AIRPORT FOR AVIATION STUDENTS IS PROVIDED BY THE INSTITUTE WITHOUT CHARGE. ARRANGEMENTS FOR THE PHYSICAL EXAMINATION FOR STUDENTS IN AVI. 101 ARE MADE BY THE INSTITUTE THROUGH THE UNIVERSITY HEALTH SERVICE UPON FINAL ACCEPTANCE IN THE PRIVATE PILOT COURSE AT REGISTRATION TIME. STUDENTS IN AVI. 104 ARE REQUIRED TO POSSESS A SECOND-CLASS F.A.A. MEDICAL CERTIFICATE DATED WITHIN THE PRECEDING TWELVE CALENDAR MONTHS.

STUDENTS ARE CAUTIONED THAT ALL TIMES AT THE AIRPORT LISTED IN THE FOLLOWING SCHEDULES REFER TO AIRBORNE TIME AND THAT A MINIMUM OF 30 MINUTES MUST BE ALLOWED FOR TRAVELING TO THE AIRPORT PRIOR TO EACH FLIGHT AND FOR RETURNING TO THE CAMPUS AFTER EACH FLIGHT. THE BUS SCHEDULE AND ROUTE FROM AIRPORT TO CAMPUS IS LISTED SEPARATELY, IMMEDIATELY FOLLOWING THE COURSE LISTINGS.

COURSES FOR UNDERGRADUATES

AVI 102 AND 103, OR 103 AND 104, OR 104 AND 205 MAY BE TAKEN CONCURRENTLY BY SPECIAL PERMISSION.

AVI 101 PRIVATE PILOT.
3 HOURS

LECT-DISC	A	9-10	MTUWTHF	423 C E H	HAAK
LECT-DISC	B	3-4	MTUWTHF	423 C E H	MOELLER
FLT	A2	8-9	MTUWTHFS	AIRPORT	BENN AND STAFF
FLT	A3	920-1020	MTUWTHFS	AIRPORT	
FLT	A4	1040-1140	MTUWTHFS	AIRPORT	
FLT	A5	1220-120	MTUWTHF	AIRPORT	
FLT	A6	140-240	MTUWTHF	AIRPORT	
FLT	A7	3-4	MTUWTHF	AIRPORT	
FLT	A8	430-530	MTUWTHF	AIRPORT	

AVI 102 SECONDARY FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC		10-11	MTUWTHF	423 C E H	MOELLER
FLT	A2	8-9	MTUWTHFS	AIRPORT	GORDON AND
FLT	A5	1220-120	MTUWTHF	AIRPORT	STAFF
FLT	A6	140-240	MTUWTHF	AIRPORT	
FLT	A7	3-4	MTUWTHF	AIRPORT	
FLT	A8	430-530	MTUWTHF	AIRPORT	

AVI 103 INTERMEDIATE FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC		12-1	MTUWTHF	423 C E H	HAAK
FLT	A1	745-1130	M TH	AIRPORT	GORDON AND
FLT	A2	140-540	M TH	AIRPORT	STAFF
FLT	A3	745-1130	TU F	AIRPORT	
FLT	A4	140-540	TU F	AIRPORT	
FLT	A5	745-1130	W S	AIRPORT	

AVI 104 ADVANCED FLIGHT.
PREREQUISITE--AVI. 102 AND 103, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC	A	11-12	MTUWTHF	423 C E H	MOELLER
LECT-DISC	B	1-2	MTUWTHF	423 C E H	MOELLER
FLT	A2	8-9	MTUWTHFS	AIRPORT	GORDON AND
FLT	A3	920-1020	MTUWTHFS	AIRPORT	STAFF
FLT	A4	1040-1140	MTUWTHFS	AIRPORT	
FLT	A5	1220-120	MTUWTHF	AIRPORT	
FLT	A6	140-240	MTUWTHF	AIRPORT	
FLT	A7	3-4	MTUWTHF	AIRPORT	
FLT	A8	430-530	MTUWTHF	AIRPORT	

COURSES FOR ADVANCED UNDERGRADUATES

AVI 205 FLIGHT INSTRUCTOR.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC		10-11	MTUWTHF	421 C E H	HAAK
FLT	A2	8-9	MTUWTHFS	AIRPORT	ANDERSON AND
FLT	A5	1220-120	MTUWTHF	AIRPORT	STAFF
FLT	A6	140-240	MTUWTHF	AIRPORT	
FLT	A7	3-4	MTUWTHF	AIRPORT	
FLT	A8	430-530	MTUWTHF	AIRPORT	

AVI 207 ADVANCED INSTRUMENT FLIGHT PROCEDURES.
PREREQUISITE--AVI. 206 OR 40 HOURS OF SIMULATED INSTRUMENT FLIGHT EXPERIENCE, JUNIOR STANDING CONSENT OF DIRECTOR.
3 HOURS

LECT-DISC		745-845	MTUWTHF	423 C E H	HAAK
FLT	A3	920-1020	MTUWTHFS	AIRPORT	ANDERSON AND
FLT	A4	1040-1140	MTUWTHFS	AIRPORT	STAFF
FLT	A5	1220-120	MTUWTHF	AIRPORT	
FLT	A6	140-240	MTUWTHF	AIRPORT	
FLT	A7	3-4	MTUWTHF	AIRPORT	
FLT	A8	430-530	MTUWTHF	AIRPORT	

AVI 292 SPECIAL RATING--MULTI-ENGINE LAND.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, CONSENT OF DIRECTOR.
1 HOUR

DISC		ARR		AIRPORT	ANDERSON
FLT	A2	8-9	MTUWTHFS	AIRPORT	ANDERSON AND
FLT	A3	920-1020	MTUWTHFS	AIRPORT	STAFF
FLT	A4	1040-1140	MTUWTHFS	AIRPORT	
FLT	A5	1220-120	MTUWTHF	AIRPORT	
FLT	A6	140-240	MTUWTHF	AIRPORT	
FLT	A7	3-4	MTUWTHF	AIRPORT	
FLT	A8	430-530	MTUWTHF	AIRPORT	

BUS SCHEDULE AND ROUTE

THE INSTITUTE OF AVIATION BUS MAKES REGULAR TRIPS BETWEEN THE AIRPORT AND THE CAMPUS BEGINNING ON THE FIRST DAY OF CLASSES AND CONTINUING THROUGH THE LAST DAY OF FINAL EXAMINATIONS. THE BUS LEAVES FROM THE CAMPUS PARKING LOCATION AT THE NORTHEAST CORNER OF AERO LAB B, AND MAKES REGULAR STOPS ON THE WAY TO THE AIRPORT AT THE CORNERS OF SIXTH AND ARMORY STREETS, FOURTH AND GREGORY STREETS AND FIRST AND GREGORY STREETS. THE TRIP FROM THE AIRPORT BACK TO THE CAMPUS IS VIA GREGORY STREET AND GOODWIN AVENUE TO THE PARKING SPOT. THE SCHEDULE IS AS FOLLOWS--

LEAVE CAMPUS	ARRIVE AIRPORT	LEAVE AIRPORT	ARRIVE CAMPUS
7.25 A.M.	7.45 A.M.	7.50 A.M.	8.10 A.M.
8.50	9.10	9.30	9.50
10.00	10.20	10.30	10.50
11.05	11.25	11.30	11.50
11.50	12.10 P.M.	12.30 P.M.	12.50 P.M.
1.05 P.M.	1.25	1.35	1.55
2.20	2.40	3.05	3.25
3.55	4.15	4.30	4.50
5.00	5.20	5.40	6.00

AVIATION
AIRCRAFT MAINTENANCE

COURSES FOR UNDERGRADUATES

AVI 161 AIRPORT SHOP MANAGEMENT.
3 HOURS
LECT-DISC 920-1010 MTUWTHF AIRPORT BAILEY

AVI 168 PROBLEMS OF AIRCRAFT MAINTENANCE.
PREREQUISITE--SOPHOMORE STANDING.
2 HOURS
LECT-DISC 8-10 TU F AIRPORT APPLEGATE

BANDS

DEPARTMENT OFFICE 140 BAND

THE SUMMER SESSION BAND IS OPEN TO STUDENTS WHO HAVE BEEN MEMBERS OF THE UNIVERSITY BANDS DURING THE ACADEMIC YEAR, AND TO OTHER STUDENTS, BOTH MEN AND WOMEN, WHO MAY QUALIFY BY PLAYING EXAMINATION. FINAL SELECTION OF MEMBERSHIP IS BY INSTRUMENTATION AND PROFICIENCY. CANDIDATES SHOULD REPORT TO THE BANDS OFFICE, 140 BAND BUILDING, DURING THE REGISTRATION PERIOD FOR ENROLLMENT AND/OR APPOINTMENTS FOR AUDITIONS. REHEARSALS WILL BE HELD FROM 7.15 TO 8.45 P.M. TUESDAY AND WEDNESDAY IN THE BAND BUILDING, AND A SERIES OF TWILIGHT CONCERTS WILL BE SCHEDULED.
MR. GUY DUKER.

BIOPHYSICS

DEPARTMENT OFFICE 524 BURRILL HALL

COURSES FOR GRADUATES

BIOPH 410 SPECIAL TOPICS IN BIOPHYSICS.
PREREQUISITE--BIOPH. 401 OR EQUIVALENT, BIOPH. 402 AND 403.
1/2 TO 1 UNIT
CONF ARR STAFF

BIOPH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

BOTANY

DEPARTMENT OFFICE 208 N H

MAJOR--TWENTY HOURS OF BOTANY EXCLUDING BOTANY 100, 101, D.G.S. 131, AND 132, BUT INCLUDING BOT. 160, 302, 303, AND 330 OR THEIR EQUIVALENT. THE BALANCE OF THE MINIMUM OF TWENTY HOURS MUST TAKEN IN OTHER 300 LEVEL COURSES. BOT. 210 AND 381 ARE STRONGLY RECOMMENDED. IN ADDITION ONE SEMESTER EACH OF ORGANIC CHEMISTRY PHYSICS AND ZOOLOGY WILL BE REQUIRED. ONE ADDITIONAL SEMESTER OF PHYSICAL SCIENCE IS ALSO REQUIRED, BUT THIS MAY BE SELECTED FROM COURSES IN PHYSICS OR GEOLOGY. CREDIT NOT TO EXCEED TWO HOURS IN BIOL. 203 AND 204 MAY BE INCLUDED IN THE TWENTY HOURS OF CREDIT FOR THE MAJOR.

MINORS--TWENTY HOURS IN ONE OR TWO SUBJECTS CHOSEN IN CONSULTATION WITH THE CHAIRMAN OF THE DEPARTMENT FROM THE FOLLOWING--AGRONOMY, CHEMISTRY, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, HORTICULTURE, MATHEMATICS, MICROBIOLOGY, PHYSICS, PHYSIOLOGY, PLANT PATHOLOGY, AND ZOOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

IF HORTICULTURE IS CHOSEN AS A MINOR, NOT MORE THAN TEN HOURS MAY BE COUNTED. THE TEN HOURS MAY BE CHOSEN FROM HORT. 100, 110, 121, 201, 230 OR 233, 242, 262, 307 OR 308, 321 OR 322, 367, AND 382.
BOTANY COURSES THAT NOW REQUIRE BOT. 100 OR 101 AND ZOOL. 101 OR 104. NOTE--ATTENTION IS CALLED TO ADDITIONAL COURSE OFFERINGS LISTED UNDER BIOLOGY.

NOTE--ATTENTION IS CALLED TO ADDITIONAL COURSE OFFERINGS LISTED UNDER BIOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

BOT 210 GENETICS.
SAME AS ZOOL. 210
PREREQUISITE--ZOOL. 101 AND BOT. 100 OR CONSENT OF INSTRUCTOR.
4 HOURS

LECT	2	MTUWTH	247	N H B	JOHNSON, RAYLE
LAB-DISC	3-5	MTUWTH	314	N H B	

BOT 293 HONORS.
PREREQUISITE--FIFTEEN HOURS OF BOTANY, SENIOR STANDING.
2 HOURS
CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

BOT 300 INDIVIDUAL TOPICS.
PREREQUISITE--BOT. 100, TEN HOURS OF ADVANCED WORK IN BOTANY OR ANOTHER BIOLOGICAL SCIENCE, SENIOR STANDING.
*GRADUATE STUDENTS MAY OFFER 1 UNIT TOWARD M. S.
*2 TO 5 HOURS, OR 1/4 OR 1/2 UNIT
CONF ARR STAFF

BOT 304 GENERAL PLANT MORPHOLOGY.
PREREQUISITE--BOT. 100 OR D.G.S. 131 AND 132, OR EQUIVALENT, SENIOR STANDING OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN BOT. 302 OR BOT. 303
*3 OR 5 HOURS, OR 1/2 OR 1 UNIT
LAB-DISC 8-10 MTUWTHFS 201 H H

BOT 330 INTERMEDIATE PLANT PHYSIOLOGY.
PREREQUISITE--ONE YEAR OF BIOLOGY AND ONE SEMESTER OF ORGANIC CHEMISTRY.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHFS	153	N H B	NANCE
LAB	9-12	MTUWTH	153	N H B	NANCE

BOT 366 FIELD BOTANY.
PREREQUISITE--ONE COURSE IN BOTANY, CONSENT OF INSTRUCTOR.
3 OR 5 HOURS, OR 1/2 OR 1 UNIT
FIELD WORK TWO HOURS TO BE ARRANGED

LAB-DISC	1-3	MTUWTHFS	258	N H B	JONES

COURSES FOR GRADUATES

BOT 493 ADVANCED STUDIES IN BOTANY.
* NOT MORE THAN 1 UNIT MAY BE APPLIED TOWARD THE GRADUATE COLLEGE M.S. DEGREE REQUIREMENT OF 3 UNITS OF COURSE WORK.
*1/2 TO 2 UNITS

A--ANATOMY--PLANT	CAROTHERS, PAOLILLO
B--CYTOGENETICS	STEFFENSEN
C--CYTOLOGY	STEFFENSEN
D--ECOLOGY--PLANT	BLISS
E--GENETICS--PLANT	LAUGHNAN
F--MORPHOLOGY--HIGHER VASCULAR PLANTS	CAROTHERS, PAOLILLO
G--MORPHOLOGY--PRIMITIVE VASCULAR PLANTS	STEWART
H--MYCOLOGY	ROGERS
I--PALEOBOTANY	STEWART, PHILLIPS
J--PHOTOSYNTHESIS	GOVINDJEE, RABINOWITCH
K--PHYCOLOGY	HOFFMAN
L--PHYSIOLOGY--PLANT	NANCE, STERN
M--TAXONOMY OF BRYOPHYTES	JONES
N--TAXONOMY OF VASCULAR PLANTS	JONES, SMITH
O--VIROLOGY--PLANT	BLACK

LAB	ARR	STAFF

BOT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

LAB	ARR	STAFF

BUSINESS

DEPARTMENT OFFICE 317B D K H

COURSES FOR GRADUATES

BUS 499 THESIS RESEARCH
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	DEMARIS

BUSINESS ADMINISTRATION

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION--205 DAVID KINLEY HALL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ADM 373 ELECTRONIC DATA PROCESSING FOR BUSINESS.
PREREQUISITE--ECON. 170, ACCY. 106 OR 108.
3 HOURS, OR 1/2 OR 1 UNIT

DISC	C	10	M W F	307	D K H	HINOMOTO
DISC	D	11	M W F	307	D K H	HINOMOTO

COURSES FOR GRADUATES

B ADM 511 BUSINESS ORGANIZATION.
PREREQUISITE--B. ADM. 510.
3/4 UNIT

DISC	8-10	MTU THF	115	D K H		BALIGH

B ADM 542 BUSINESS AND SOCIETY.
PREREQUISITE--ENROLLMENT IN GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT

DISC	1-3	MTU THF	115	D K H		LORD

B ADM 544 EXECUTIVE POLICIES AND PLANNING.
PREREQUISITE--FIRST YEAR MASTER OF BUSINESS ADMINISTRATION COURSES OR EQUIVALENT.
1 UNIT

DISC	8-10	MTU THF	305	D K H		SLATE

B ADM 551 FINANCIAL ANALYSIS.
PREREQUISITE--ENROLLMENT IN THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT

DISC	10-12	MTU THF	305	D K H		PAIK

B ADM 590 INDEPENDENT STUDY AND RESEARCH.
1/2 OR 1 UNIT

CONF	ARR					

B ADM 599 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR					

BUSINESS EDUCATION

DEPARTMENT OFFICE 9 D K H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ED 351 IMPROVEMENT OF INSTRUCTION IN SHORTHAND.
PREREQUISITE--SIXTEEN HOURS IN COMMERCE, INCLUDING B. ED. 112--SIXTEEN HOURS IN EDUCATION, INCLUDING ED. 242.
2 HOURS, OR 1/2 UNIT
*SECTION C MEETS THE FIRST FOUR WEEKS.

LECT-DISC	*C	10	TUWTHF	10	D K H	REED

B ED 361 TEACHING OFFICE MANAGEMENT AND MACHINE OPERATIONS.
PREREQUISITE--ED. PR. 241 AND 242, SIXTEEN HOURS IN COMMERCE SIX OF WHICH MUST BE IN ACCOUNTING, ONE YEAR TEACHING EXPERIENCE.
2 HOURS, OR 1/2 UNIT

LECT	A	8	TUWTHF	8	D K H	MELSON
LAB	E	1-3	TUWTHF	8	D K H	MAHAFFEY

COURSES FOR GRADUATES

SEE VO TEC 456--BUSINESS EDUCATION SECTION, SEC. B
SEE VO TEC 459--AUTOMATION SECTION, SEC. C

B ED 490 SPECIAL TOPICS.
*CREDIT CANNOT BE APPLIED TO A DEGREE IF A THESIS IS SUBMITTED.
*1/2 OR 1 UNIT

CONF	ARR			9	D K H	CONDON

B ED 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN BUSINESS EDUCATION.
1/2 TO 2 UNITS
CONF ARR 9 D K H CONDON

BUSINESS LAW

DEPARTMENT OFFICE 317B D K H

COURSES FOR UNDERGRADUATES

B LAW 100 BASIC PRINCIPLES OF BUSINESS LAW.
PREREQUISITE--ACCY. 105, ECON. 102, FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN FOR B. LAW 100 IN ADDITION TO B. LAW 201 OR 261
*3 HOURS
LECT-DISC B 9 MTUWTHFS 325 D K H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B LAW 301 THE LAW OF SECURITY TRANSACTIONS AND BANKING.
PREREQUISITE--SENIOR STANDING, B. LAW. 100, OR CREDIT OR
REGISTRATION IN B. LAW. 202.
3 HOURS, OR 3/4 OR 1 UNIT
LECT-DISC C 10 MTUWTHFS 325 D K H

CERAMIC ENGINEERING

DEPARTMENT OFFICE 204 CER

COURSES FOR ADVANCED UNDERGRADUATES

CER E 299 THESIS.
1 TO 3 HOURS
LAB-DISC ARR

COURSES FOR GRADUATES

CER E 495 MATERIALS AND SPECIAL PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
1 OR 2 UNITS
CONF ARR

CER E 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR

CHEMISTRY AND CHEMICAL ENGINEERING

DEPARTMENT OFFICE 108 N L

MAJOR--NOT LESS THAN TWENTY HOURS IN CHEMISTRY, EXCLUDING CHEM. 101, 102, 104, 105, 107, 108, 109, AND 111. ONE SEMESTER OF BASIC WORK IN EACH OF THE FOLLOWING AREAS MUST BE INCLUDED--QUANTITATIVE ANALYSIS, ORGANIC CHEMISTRY, AND PHYSICAL CHEMISTRY. IN ADDITION THERE MUST BE INCLUDED TWO APPROVED 300 LEVEL COURSES, ONE IN EACH OF TWO AREAS OF CHEMISTRY. THESE TWO COURSES MUST HAVE THE APPROVAL OF THE DEPARTMENTAL ADVISER. IT IS VERY DESIRABLE THAT THE STUDENT PLAN HIS COURSE WORK AS EARLY AS POSSIBLE IN CONSULTATION WITH HIS ADVISER.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CERAMIC ENGINEERING, ENTOMOLOGY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHILOSOPHY, PHYSICS, PHYSIOLOGY, PSYCHOLOGY, AND ZOOLOGY. WITH THE WRITTEN APPROVAL OF THE DEPARTMENTAL ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED.

DEPARTMENTAL DISTINCTION--STUDENTS IN CHEMISTRY REGISTERED IN CHEM. 290--THESIS--OR STUDENTS IN CHEMICAL ENGINEERING REGISTERED IN CH. E. 290--THESIS--OR 379--PROJECTS--OR 381--PLANT DESIGN--BECOME CANDIDATES FOR DEPARTMENTAL DISTINCTION. ALL STUDENTS ARE ELIGIBLE FOR COLLEGE HONORS WHO HAVE A 4.0 AVERAGE OR BETTER. THE LEVEL OF DISTINCTION TO BE RECOMMENDED IS DETERMINED BY THE QUALITY OF THE SPECIAL WORK DONE IN ADDITION TO THE REQUIREMENT THAT THE OVER-ALL GRADE-POINT AVERAGES, EXCLUSIVE OF MILITARY TRAINING AND PHYSICAL EDUCATION, OF A 4.0, 4.25, AND 4.5 ARE REQUIRED FOR THE CITATIONS OF DISTINCTION, HIGH DISTINCTION, AND HIGHEST DISTINCTION, RESPECTIVELY RECOMMENDATION IS MADE TO THE DEAN OF THE COLLEGE BY THE HEAD OF THE DEPARTMENT.

SEQUENCE OF COURSES--STUDENTS IN THE CURRICULUM IN CHEMISTRY, MAJORS IN CHEMISTRY, AND ALL OTHERS WHO DESIRE A THOROUGH TRAINING IN THE FUNDAMENTALS OF CHEMISTRY AND THEIR APPLICATIONS TO MODERN LIFE SHOULD SELECT COURSES FROM THE FOLLOWING, USUALLY IN THE SEQUENCE GIVEN--CHEM. 107, 108, 234, 336, 342, 343, 344, 345, 321, 315, AND COURSES IN BIOCHEMISTRY, CHEMICAL ENGINEERING, ANALYTICAL, INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY. STUDENTS WHO DO NOT MEET THE REQUIREMENTS OF PREVIOUS HIGH SCHOOL CHEMISTRY AND THE THOROUGH MATHEMATICS BACKGROUND NECESSARY FOR REGISTRATION IN CHEM. 107, MAY REGISTER IN CHEM. 101 OR 102 BEFORE TAKING THE SEQUENCE CHEM. 107 AND 108. STUDENTS IN THE COLLEGE OF ENGINEERING--EXCEPT CERAMISTS, CERAMIC ENGINEERS, AND THOSE WHO WISH TO TAKE CHEM. 342--SHOULD REGISTER IN CHEM. 101 OR 102, 104, 123, OR IN 109 AND 123.

STUDENTS WHO WISH TO SATISFY A LIMITED CHEMISTRY REQUIREMENT MAY REGISTER FOR THE SEQUENCE CHEM. 101 OR 102, 105, 122, 132, OR 133. STUDENTS WITH EXCEPTIONALLY GOOD RECORDS MAY TAKE 109 INSTEAD OF 102 AND 105.
BIOCHEMISTRY--STUDENTS WHO WISH TO SPECIALIZE IN BIOCHEMISTRY ARE DIRECTED TO THE CHEMISTRY CURRICULUM OR TO A STRONG CHEMISTRY MAJOR PROGRAM. SUCH STUDENTS SHOULD PLAN THEIR PROGRAMS SO AS TO INCLUDE, IN ADDITION TO CHEMISTRY AND BIOCHEMISTRY, BASIC COURSES IN MATHEMATICS, THROUGH CALCULUS, AND PHYSICS, THROUGH PHYSICS 108, AND A YEAR OF ADVANCED UNDERGRADUATE BIOLOGY. STUDENTS IN RELATED FIELDS WISHING TO TAKE UNDERGRADUATE COURSES IN BIOCHEMISTRY ARE URGED TO PLAN THEIR PROGRAMS SO AS TO PROVIDE AN EQUIVALENT BACKGROUND. STUDENTS ARE ENCOURAGED TO DISCUSS THEIR PROGRAMS WITH THE STAFF OF THE DIVISION OF BIOCHEMISTRY OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING.

RESTRICTIONS--STUDENTS IN THE CURRICULA OF CHEMISTRY OR CHEMICAL ENGINEERING MUST HAVE AT LEAST A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, IN ORDER TO BE ACCEPTED BY THE DEPARTMENT AS JUNIORS OR SENIORS. A TRANSFER STUDENT TO BE ACCEPTED MUST HAVE A CORRESPONDING RECORD IN THE INSTITUTION OR INSTITUTIONS FROM WHICH HE TRANSFERS AND MUST MAINTAIN A SIMILAR AVERAGE AT THE UNIVERSITY OF ILLINOIS. WITH THE EXCEPTION OF STUDENTS IN THE COLLEGE OF ENGINEERING AND THE COLLEGE OF AGRICULTURE, REGISTRATION OF STUDENTS IN CHEMISTRY COURSES EXCEPT THOSE OF FRESHMAN AND SOPHOMORE GRADE, NAMELY, CHEM. 101, 102, 104, 105, 107, 108, 109, 111, 122, 123, 132, 133, NORMALLY IS RESTRICTED TO STUDENTS HAVING A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, OR AN AVERAGE OF AT LEAST 3.5 IN CHEMISTRY COURSES. ANY JUNIOR OR SENIOR WHO CANNOT MEET EITHER OF THESE REQUIREMENTS MUST PETITION FOR ADMITTANCE AS A MAJOR OR MINOR IN CHEMISTRY.

CHEMISTRY

COURSES FOR UNDERGRADUATES

CHEM 101 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL PHYSICS, OR TWO AND ONE-HALF UNITS OF HIGH SCHOOL MATHEMATICS, OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT	2	MTUWTH	112	C	A	BURMEISTER
QUIZ	1	MTUWTH	8	C	A	
LAB	10-12	MTUWTH	201	C	A	

CHEM 102 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL CHEMISTRY OR EQUIVALENT, 2 1/2 UNITS OF HIGH SCHOOL MATHEMATICS OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE 2 HOURS CREDIT.
*3 HOURS

LECT	2	MTUWTH	112	C	A	BURMEISTER
QUIZ	1	MTUWTH	111	N	L	
LAB	10-12	TU TH	201	C	A	

CHEM 122 ELEMENTARY QUANTITATIVE ANALYSIS.
FOR ALL STUDENTS IN HOME ECONOMICS AND PREMEDICAL COURSES AND ALL OTHERS WHO HAVE NOT FOLLOWED THE SEQUENCE CHEM. 101 OR 102, 107 AND 108.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

LECT	8	MTU THF	111	N	L	
QUIZ	8	W S	111	N	L	
LAB	9-12	MTUWTHFS	301	C	A	

CHEM 123 QUANTITATIVE ANALYSIS FOR ENGINEERS.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

LECT	8	MTU THF	111	N	L	
QUIZ	8	W S	111	N	L	
LAB	9-12	MTUWTHFS	301	C	A	

CHEM 132 ELEMENTARY ORGANIC CHEMISTRY.
PREREQUISITE--CHEM. 101, 102, 109, OR EQUIVALENT.
3 HOURS

LECT	8	TUWTHF	217	N	L	BRADY
QUIZ	1	TU TH	161	N	L	
LAB	2-5	TU TH	467	N	L	

CHEM 133 ELEMENTARY ORGANIC CHEMISTRY.
FOR STUDENTS IN AGRICULTURAL SCIENCE, DAIRY TECHNOLOGY, FOOD TECHNOLOGY, NUTRITION, DIETETICS, AND PREMEDICAL, PREDENTAL AND PREVETERINARY COURSES. PREREQUISITE--CHEM. 105 OR 109.
5 HOURS

LECT		9	MTU THF	112	C A	
QUIZ		9	W S	112	C A	
CONF		1	W F	103	N L	
LAB	F	2-5	W F	467	N L	
	F	1-5	M	467	N L	

COURSES FOR ADVANCED UNDERGRADUATES

CHEM 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMISTRY CURRICULUM PREREQUISITE--MAJORS IN CHEMISTRY IN THE GENERAL CURRICULUM MAY REGISTER IF THEY HAVE COMPLETED A MINIMUM OF TWENTY-THREE HOURS OF CHEMISTRY, WHICH MUST INCLUDE AT LEAST FIVE HOURS FROM THE COURSES FOR ADVANCED UNDERGRADUATES. OTHER STUDENTS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT WHO DESIRES TO DO RESEARCH MUST RECEIVE SPECIAL WRITTEN PERMISSION FROM THE INSTRUCTOR UNDER WHOM HE WISHES TO WORK. SUCH WRITTEN PERMISSION SHOULD BE PRESENTED, AT THE TIME OF REGISTRATION, TO THE ADVISER FOR THE CHEMISTS. EACH STUDENT TAKING THIS COURSE MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. IN ORDER TO RECEIVE CREDIT A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CHEM. 290.
2 TO 6 HOURS

CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CHEM 315 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN PHYSICAL CHEMISTRY.
3 HOURS, OR 3/4 UNIT

LECT	D	11	MTUWTHF	136	BUR HALL	
	D	4	TU	136	BUR HALL	

CHEM 316 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN CHEM. 315.
2 HOURS, OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

CONF		4	TH	8	C A	D F MARTIN
LAB		*1-4	M F	305	N L	

CHEM 321 CHEMICAL AND INSTRUMENTAL ANALYSIS.
PREREQUISITE--CHEM. 336, AND 340 OR 342 WITH CONCURRENT REGISTRATION IN CHEM. 343 AND 344.
5 HOURS, OR 3/4 OR 1 1/4 UNITS

LECT		8	MTUWTHFS	161	N L	
LAB	A	9-12	MTUW	315	N L	
	A	1-5	MTU	315	N L	
LAB	B	1-4	W	315	N L	
	B	9-12	THF	315	N L	
	B	1-5	THF	315	N L	

CHEM 338 SYSTEMATIC IDENTIFICATION OF ORGANIC COMPOUNDS.
PREREQUISITE--CHEM. 336 AND 337, OR EQUIVALENT.
3 HOURS, OR 3/4 UNIT

CONF	A	8	M W F	8	C A	
	A	1	M	103	N L	
LAB		1-6	TU TH	218	N L	

CHEM 342 PHYSICAL CHEMISTRY.
PREREQUISITE--CHEM. 108, 122, 123, OR EQUIVALENT, PHYCS. 106, 107, AND 108, OR TWO SEMESTERS OF GENERAL PHYSICS WITH CONCURRENT REGISTRATION IN THE THIRD SEMESTER, CREDIT OR REGISTRATION IN MATH 142 OR EQUIVALENT. STUDENTS SHOULD NOT REGISTER IN 342 WHO DO NOT INTEND TO ENROLL IN 344.
3 HOURS, OR 3/4 UNIT

LECT		9	MTUWTHFS	161	N L	BROOKS

CHEM 343 PHYSICAL CHEMISTRY LABORATORY, I.
PREREQUISITE--CHEM. 342.
1 HOUR, OR 1/4 UNIT
LAB ARR 124 N L

CHEM 345 PHYSICAL CHEMISTRY LABORATORY, II.
PREREQUISITE--CHEM. 342, CREDIT OR REGISTRATION IN CHEM. 343 AND 344.
1 HOUR, OR 1/4 UNIT
LAB ARR 116 N L

CHEM 350 GENERAL BIOCHEMISTRY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY AND CHEM. 133 OR 234, OR EQUIVALENTS, REGISTRATION IN CHEM. 355.
3 HOURS, OR 3/4 UNIT
LECT 8 MTUWTHFS 115 E C

CHEM 355 BIOCHEMISTRY LABORATORY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY, CHEM. 133 OR 234, OR EQUIVALENT, REGISTRATION IN CHEM. 350.
3 HOURS, OR 3/4 UNIT
LAB 9-12 MTUWTHF 318 E C

COURSES FOR GRADUATES

CHEM 404 ADVANCED INORGANIC CHEMISTRY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN A 400 LEVEL LECTURE COURSE IN INORGANIC CHEMISTRY.
1/4 OR 3/4 UNIT
LAB ARR 305 N L D F MARTIN

CHEM 405 INORGANIC CHEMISTRY SEMINAR.
REQUIRED OF ALL GRADUATE STUDENTS MAJORING IN INORGANIC CHEMISTRY.
1/4 UNIT
LECT-DISC 3-5 TU TH 140 BUR HALL D F MARTIN

CHEM 434 ADVANCED ORGANIC SYNTHESIS.
1/2 OR 1 UNIT
LAB ARR 218 N L

CHEM 435 ORGANIC CHEMISTRY SEMINAR.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 UNIT
LECT-DISC 10 M W F 124 BUR HALL

CHEM 449 SPECIAL TOPICS IN PHYSICAL CHEMISTRY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE CREDIT.
*1/2 OR 1 UNIT
LECT 10 MTUWTHF 115 E C

CHEM 455 BIOCHEMISTRY SEMINAR.
REQUIRED OF GRADUATE STUDENTS WHOSE MAJOR IS BIOCHEMISTRY.
PREREQUISITE--CHEM. 350 AND 355, OR EQUIVALENT.
1/2 UNIT
LECT-DISC 10-12 TU TH 397 E C

CHEM 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS, SUBJECT TO THE APPROVAL OF ONE OF THE QUALIFIED STAFF MEMBERS-

ANALYTICAL CHEMISTRY . . .BROWNLEE, HARTLEY, JUVET, LAITINEN, MALMSTADT, PFLUGER

BIOCHEMISTRY . . . CARTER, CLARK, CONRAD, GUNSALUS, HAGER, HASTINGS, RUTTER, WEBER, WOLD,
BIOPHYSICAL CHEMISTRY . . . HASTINGS, VAN HOLDE WEBER, WOLD,

INORGANIC CHEMISTRY . . . BAILAR, BROWN, DRAGO, KAY,
MOELLER, PIPER, D. F. MARTIN.

ORGANIC CHEMISTRY . . . APPLEQUIST, CURTIN, LEONARD, MARTIN
RINEHART, SMITH, SNYDER

PHYSICAL CHEMISTRY . BELFORD, DRICKAMER, FLYGARE, GUTOWSKY,
HUMMEL, PHIPPS, VAN HOLDE, WALL
YANKWICH

CHEMISTRY--
APPLIED ELECTROCHEMISTRY--ORGANIC AND INORGANIC . . . SWANN

RADIOCHEMISTRY . . . . . NYSTROM, KAY, BROWNLEE, HUMMEL

RESEARCH FOR THE PH. D. IS ALSO OFFERED IN SPECIALIZED FIELDS OTHER THAN THOSE ILLUSTRATED ABOVE. STUDENTS WHO INTEND TO MAJOR IN CHEMISTRY IN ONE OF THESE SPECIAL FIELDS SHOULD CONSULT WITH THE PROFESSOR IN CHARGE OF THE THESIS AND WITH THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING IN REGARD TO THE PROGRAMS OF COURSES AND EXAMINATIONS.

	CONF	ARR				STAFF

CHEMICAL ENGINEERING

COURSES FOR ADVANCED UNDERGRADUATES

CH E 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMICAL ENGINEERING CURRICULUM ANY OTHERS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT.
*EACH STUDENT MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. HOWEVER, CH. E. 379 TWO HOURS, MAY BE SUBSTITUTED FOR TWO OF THE FIVE HOURS REQUIRED IN CH. E. 290. IN ORDER TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CH. E. 290.
*2 TO 6 HOURS

	CONF	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CH E 367 INTRODUCTION TO PROCESS CONTROL.
PREREQUISITE--MATH. 345 OR 343, CH. E. 371.
3 HOURS, OR 3/4 UNIT

LECT	9	MTUWTH	193	E C		PERLMUTTER
LAB	1-5	M W	201	E C		

CH E 379 CHEMICAL ENGINEERING PROJECTS.
PREREQUISITE--SENIOR STANDING IN CHEMISTRY OR CHEMICAL ENGINEERING.
2 HOURS, OR 1/2 UNIT

LAB	1-6	TU TH	294	E C		PERLMUTTER

CHEM 397 RADIOCHEMISTRY.
SAME AS NUC E 397.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT.
*ONE ADDITIONAL HOUR TO BE ARRANGED

LECT	*10	MTUWTHF	111	N L		BROWNLEE

CHEM 398 RADIOCHEMISTRY LABORATORY.
SAME AS NUC E 398.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT.

CONF	1	TU	103	N L		BROWNLEE AND
LAB	2-5	TU TH	20	N L		ASSISTANTS

COURSES FOR GRADUATES

CH E 488 HEAT TRANSMISSION.
PREREQUISITE--CH. E. 371, OR EQUIVALENT WITH CONSENT OF INSTRUCTOR.
3/4 UNIT
LECT 11 MTUWTH 193 E C WESTWATER

CH E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
DRICKAMER, HANRATTY, HUDSON, PERLMUTTER,
QUINN, SCHMITZ, SWANN, WESTWATER
CONF ARR STAFF

CITY PLANNING

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

C P 488 CITY PLANNING RESEARCH.
PREREQUISITE--ENROLLMENT FOR MASTERS DEGREE IN CITY PLANNING OR
GRADUATE STATUS IN RELATED FIELD AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
CONF ARR 205 M H WETMORE

C P 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR 205 M H WETMORE

CIVIL ENGINEERING

DEPARTMENT OFFICE 203 C E H

COURSES FOR ADVANCED UNDERGRADUATES

C E 262 STRUCTURAL THEORY, II.
PREREQUISITE--C. E. 261.
3 HOURS
LECT-DISC E 8 MTUWTHFS 305 C E H

C E 263 BEHAVIOR AND DESIGN OF METAL STRUCTURES, I.
PREREQUISITE--T.A.M. 224 AND C.E. 261, OR CONSENT OF INSTRUCTOR.
3 HOURS
LECT-DISC E 10 MTUWTHFS 305 C E H

C E 264 REINFORCED CONCRETE DESIGN, I.
PREREQUISITE--T.A.M. 224, C.E. 214, CREDIT OR REGISTRATION IN
C.E. 262.
3 HOURS
NOTE--THREE-TWO HOUR DEMONSTRATION LABORATORIES TO BE ARRANGED.
*SECTION F IS A SPECIAL FOUR-WEEK COURSE BEGINNING
AUGUST 10 FOR MILITARY STUDENTS ONLY.
LECT-DISC E 9 MTUWTHFS 305 C E H
LECT-DISC F ARR

C E 290 CONTRACTS AND SPECIFICATIONS.
SAME AS G. E. 290.
PREREQUISITE--SENIOR STANDING IN ENGINEERING OR ARCHITECTURE.
3 HOURS
SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 10 FOR MILITARY STUDENTS ONLY.
LECT-DISC E ARR

C E 297 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING.
1 TO 4 HOURS
CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C E 334 AIRPORT DESIGN.
PREREQUISITE--C.E. 220 AND SENIOR STANDING IN CIVIL ENGINEERING, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC E 1 MTUWTHF 200 T L HERRIN

C E 366 BEHAVIOR OF REINFORCED CONCRETE MEMBERS.
PREREQUISITE--UNDERGRADUATES-SENIOR STANDING AND C.E. 264, GRAD STUDENTS-B.S.DEGREE IN C.E. OR ARCHITECTURE WITH COURSES IN STRUCTURES AND REINFORCED CONCRETE DESIGN.
4 HOURS, OR 1 UNIT
LECT-DISC 1-3 M W F ARR SIESS

C E 380 FOUNDATION ENGINEERING.
PREREQUISITE--C E 210, SENIOR STANDING.
3 HOURS, OR 1 UNIT
LECT-DISC E 8 MTUWTHFS 320 C E H DAVISSON

C E 383 SOIL MECHANICS.
UNDERGRADUATE PREREQUISITE--C.E. 210, SENIOR STANDING AND CONSENT OF INSTRUCTOR. GRADUATE PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT
LECT-DISC E 11 MTUWTHFS 200 T L IRELAND

C E 391 NUMERICAL AND COMPUTER APPLICATIONS IN CIVIL ENGINEERING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN CIVIL OR ARCH. ENG. OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC E 9 MTUWTHFS 322 C E H FENVES

COURSES FOR GRADUATES

C E 460 STRUCTURAL ANALYSIS.
PREREQUISITE--B.S. DEGREE IN ENGINEERING AND UNDERGRADUATE COURSE IN THEORY OF SIMPLE STRUCTURES.
1 UNIT
LECT-DISC E 10 MTUWTHF 305 C E H GAYLORD

C E 461 STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--B.S. IN C.E., AND C.E. 361, OR C.E. 460, OR EQUIVALENT
1 UNIT
LECT-DISC E 11 MTUWTHF 320 C E H

C E 465 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--B.S. IN ENGINEERING WITH COURSES IN STRUCTURES.
1 UNIT
LECT-DISC E 3 MTUWTHF 305 C E H GAYLORD

C E 468 ANALYSIS AND DESIGN OF PRESTRESSED CONCRETE STRUCTURES.
PREREQUISITE--B.S. IN CIVIL OR ARCHITECTURAL ENGINEERING WITH COURSES IN REINFORCED CONCRETE AND IN ANALYSIS OF INDETERMINATE STRUCTURES.
1 UNIT
LECT-DISC E 1 MTUWTHF ARR GAMBLE

C E 471 NUMERICAL AND APPROXIMATE METHODS OF STRUCTURAL ANALYSIS.
1 TO 2 UNITS
LECT-DISC E 9 MTUWTHF 320 C E H SUTCLIFFE

C E 475 BEHAVIOR OF STEEL STRUCTURES.
PREREQUISITE--GRADUATE STANDING IN C.E. OR T.A.M.
1 UNIT
LECT-DISC E 8 MTUWTHF 200 T L MUNSE

C E 484 FOUNDATION ENGINEERING.
PREREQUISITE--C. E. 384.
1 UNIT
LECT-DISC 2 MTUWTHF ARR PECK

C E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS
CONF O ARR STAFF

C E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION-M-IS FOR MASTERS DEGREE, SECTION-D-IS FOR PH.D. DEGREE.
CONF D ARR STAFF
CONF M ARR STAFF

COMMUNICATIONS

DEPARTMENT OFFICE 119D GREGORY HALL

THE GRADUATE PROGRAM LEADING TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATIONS IS ADMINISTERED BY AN INTERDISCIPLINARY COMMITTEE APPOINTED BY THE DEAN OF THE GRADUATE COLLEGE. STUDENTS SEEKING ADMISSION TO THIS PROGRAM SHOULD CONSULT THEODORE PETERSON, CHAIRMAN OF THE COMMITTEE.

OF THE COURSES OFFERED THIS SEMESTER, COMM. 490 AND 499 ARE IN THE GENERAL CATEGORY, COMM. 473 IS IN GROUP A.

COURSES FOR GRADUATES

COMM 473 HISTORY AND THEORY OF FREEDOM OF THE PRESS.
SAME AS JOURN. 473.
1 UNIT
LECT-DISC 9-11 TU TH 123 G H JENSEN

COMM 490 SPECIAL TOPICS IN COMMUNICATIONS.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS.
1/2 TO 2 UNITS
CONF ARR STAFF

COMM 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS AND THESIS SUPERVISOR.
*STUDENTS MAY ACCUMULATE A TOTAL OF 8 UNITS.
*0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

DAIRY SCIENCE

DEPARTMENT OFFICE 315 A S L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

D S 300 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING, APPROVAL OF HEAD OF DEPARTMENT.
3 TO 5 HOURS, OR 1/2 TO 1 UNIT

CONF	ARR		SALISBURY AND STAFF

COURSES FOR GRADUATES

D S 493 SPECIAL PROBLEMS.
1/2 TO 2 UNITS

CONF	ARR		SALISBURY AND STAFF

D S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR		SALISBURY AND STAFF

DAIRY TECHNOLOGY

SEE FOOD SCIENCE

DIVISION OF GENERAL STUDIES L A S

DEPARTMENT OFFICE 221 A H

COURSES FOR UNDERGRADUATES

D G S 111 VERBAL COMMUNICATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

DISC		8-10	MTUWTH	141 A H	DRAPER

D G S 132 BIOLOGICAL SCIENCE, II.
PREREQUISITE--D.G.S. 131 OR CONSENT OF INSTRUCTOR.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		11	MTUWTH	247 N H B	GLAWE
LAB-DISC	1	1-3	MTUWTH	432 N H B	
LAB-DISC	2	3-5	MTUWTH	432 N H B	

D G S 161 LITERATURE AND FINE ARTS, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
4 HOURS

LECT-DISC		1-3	MTUWTH	196 L H	DRAPER

ECONOMICS

DEPARTMENT OFFICE 226 D K H

SEE ALSO ACCOUNTANCY, AGRICULTURAL ECONOMICS, BUSINESS EDUCATION, BUSINESS LAW, FINANCE, MANAGEMENT, AND MARKETING

MAJOR--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108 OR 102 AND 103, AND ECON. 300 AND 301. LIBERAL ARTS MAJORS IN ECONOMICS ARE STRONGLY ADVISED TO ELECT ECON. 171 AND ACCY. 201. ECON. 171 IS ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR, BUT ACCY. 201 IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, EDUCATION, FINANCE, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY. AN ECONOMICS MAJOR WHO CHOOSES FINANCE AS A MINOR MUST INCLUDE TWELVE HOURS IN A SECOND MINOR. THE CURRICULUM IN LATIN-AMERICAN OR RUSSIAN AREA STUDIES IS ACCEPTED AS A MINOR.

NOTE--ECON. 102 AND 103 ARE REQUIRED FOR ALL COMMERCE STUDENTS, AND THESE OR 108 ARE REQUIRED FOR ALL LIBERAL ARTS MAJORS IN ECONOMICS. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN ECONOMICS SHOULD TAKE THESE COURSES IN THEIR SOPHOMORE YEAR.

COURSES FOR UNDERGRADUATES

ECON 102 PRINCIPLES OF ECONOMICS, I.
PREREQUISITE--SOPHOMORE STANDING OR SECOND SEMESTER FRESHMAN HONOR STUDENT OR JAMES SCHOLAR.
3 HOURS

LECT-DISC	A	8	MTUWTHF	125	D K H	
	A	3	M	125	D K H	

ECON 103 PRINCIPLES OF ECONOMICS, II.
PREREQUISITE--ECON. 102.
3 HOURS

LECT-DISC	B	9	MTUWTHF	125	D K H	RAFUSE
	B	3	TU	125	D K H	

ECON 108 ELEMENTS OF ECONOMICS.
NOT OPEN TO COMMERCE STUDENTS OR STUDENTS WHO HAVE HAD ECON. 102 AND 103.
PREREQUISITE--FIRST SEMESTER FRESHMAN IN ENGINEERING, SECOND SEMESTER FRESHMAN IN OTHER COLLEGES.
3 HOURS

LECT-DISC	C	10	MTUWTHF	222	D K H	HARBESON
	C	3	W	222	D K H	
LECT-DISC	D	11	MTUWTHF	125	D K H	RAFUSE
	D	3	TH	125	D K H	

ECON 109 ELEMENTS OF ECONOMICS.
FOR NON-COMMERCE STUDENTS. PREREQUISITE--ECON. 108.
3 HOURS

LECT-DISC	D	11	MTUWTHF	119	D K H	WESTON
	D	3	TH	119	D K H	

ECON 170 ELEMENTS OF STATISTICS.
PREREQUISITE--ECON. 102 OR 108, SOPHOMORE STANDING.
*NOT OPEN FOR CREDIT IN ADDITION TO ECON. 171, MATH. 161, OR PSYCH. 135.
*3 HOURS

LECT-DISC	C	10	MTUWTHF	125	D K H	WEBER
	C	3	W	125	D K H	

COURSES FOR ADVANCED UNDERGRADUATES

ECON 210 COMPARATIVE ECONOMIC SYSTEMS.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	B	9	MTUWTHF	222	D K H	GRAY
	B	3	TU	222	D K H	

ECON 214 GOVERNMENT FINANCE AND TAXATION.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	C	10	MTUWTHF	119	D K H	WESTON
	C	3	W	119	D K H	

ECON 288 GOVERNMENT REGULATION OF ECONOMIC ACTIVITY.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	11	MTUWTHF	222	D K H	HARBESON
	D	3	TH	222	D K H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ECON 300 INTERMEDIATE ECONOMIC THEORY AND ANALYSIS.
PREREQUISITE--ECON. 103, OR 109, OR A GRADE OF B OR BETTER
IN ECON. 108.
3 HOURS, OR 1/2 UNIT

LECT-DISC	B	9	MTUWTHF	223	D K H	RESEK
	B	3	TU	223	D K H	

ECON 372 OPERATIONS RESEARCH.
PREREQUISITE--ECON. 170 AND MGMT. 101, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	C	10	MTUWTHF	223	D K H	AIGNER
	C	3	W	223	D K H	

COURSES FOR GRADUATES

ECON 401 GENERAL ECONOMIC THEORY.
PREREQUISITE--ECON. 102 AND 103, OR 108.
1 UNIT

LECT-DISC	8-10	TU F	111	D K H	SPRENKLE

ECON 414 PUBLIC FINANCE.
PREREQUISITE--SIX HOURS OF ECONOMICS.
1 UNIT

LECT-DISC	10-12	M TH	111	D K H	ALLEN

ECON 480 SEMINAR IN RELATIONS OF GOVERNMENT AND BUSINESS, I.
1 UNIT

LECT-DISC	10-12	TU F	111	D K H	GRAY

ECON 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

LECT-DISC	8-10	W	111	D K H	ALLEN

EDUCATION

DEPARTMENT OFFICE 105 G H OR 110 EDUC

COURSES FORMERLY LISTED AS EDUCATION, AGRICULTURAL EDUCATION, OR INDUSTRIAL EDUCATION COURSES HAVE BEEN ASSIGNED NEW DEPARTMENTAL DESIGNATIONS WITHOUT CHANGE OF NUMBER EXCEPT FOR ONE COURSE--FORMER ED. 277 IS NOW LISTED AS VO. TEC. 278. SOME COURSES ARE NOW LISTED IN MORE THAN ONE WAY AS EL. ED. 101--DEPARTMENT OF ELEMENTARY EDUCATION, SE. ED. 101--DEPARTMENT OF SECONDARY AND CONTINUING EDUCATION, AND VO. TEC. 101--DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION. CARE SHOULD BE TAKEN IN SELECTION OF THE APPROPRIATE COURSE WHEN IT APPEARS IN MULTIPLE LISTING. COURSES ARE LISTED IN NUMERICAL SEQUENCE.

NOTE--EDUCATIONAL PRACTICE INFORMATION AND COURSES APPEAR AT THE END OF THE COLLEGE OF EDUCATION LISTING.

COURSES FOR UNDERGRADUATES

SE ED 101 NATURE OF THE TEACHING PROFESSION.
2 HOURS
*LIMITED TO STUDENTS MAJORING IN ENGLISH.

LECT-DISC		9	TUWTHF	111	G H	WALKER

VOTEC 189 INDUSTRIAL PRACTICES.
PREREQUISITE--SOPHOMORE STANDING, ENROLLMENT IN INDUSTRIAL EDUCATION OPTIONS II AND III.
*STUDENTS MAY ACCUMULATE SEVENTEEN HOURS.
*2 OR 3 HOURS

PRACT		ARR				TOMLINSON

COURSES FOR ADVANCED UNDERGRADUATES

HP ED 201 FOUNDATIONS OF AMERICAN EDUCATION.
PREREQUISITE--EL. ED. 101 OR SE. ED. 101 OR VO. TEC. 101, PSYCH. 100
2 HOURS

LECT-DISC	B	9	TUWTHF	113	G H	
LECT-DISC	C	10	TUWTHF	113	G H	
LECT-DISC	D	11	TUWTHF	113	G H	

EDPSY 211 EDUCATIONAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100.
3 HOURS

LECT-DISC		8	TUWTHF	111	G H	OLSTAD
LAB		1-3	TU	111	G H	

EL ED 230 PRINCIPLES OF ELEMENTARY EDUCATION.
PREREQUISITE--SENIOR STANDING, CONCURRENT REGISTRATION IN EL. ED. 231 AND ED. PR. 232.
2 HOURS

LECT-DISC		10	TUWTHF	111	G H	DUDLEY

EL ED 233 CLASSROOM PROGRAMS IN CHILDHOOD EDUCATION.
PREREQUISITE--JUNIOR STANDING.

LECT-DISC		8	TUWTHF	221	G H	DUDLEY

EL ED 235 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 101, JUNIOR STANDING.
3 HOURS.

LECT-DISC		9	TUWTHF	221	G H	JOZWIAK
LAB		ARR				

EL ED 236 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--PSYCH. 100, EL. ED. 101.
3 HOURS

LECT		8	TUWTHF	113	G H	CLARIZIO
LAB		1-3	TU TH	113	G H	

EL ED 237 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--EL. ED. 236, CONCURRENT REGISTRATION IN EL. ED. 233.
3 HOURS

LECT	10	TUWTHF	385	EDUC	L QUAY
LAB	1-3	TU TH	385	EDUC	

SE ED 240 PRINCIPLES OF SECONDARY EDUCATION.
PREREQUISITE--SE. ED. 101, PSYCH. 100.
2 HOURS

LECT-DISC	8	TUWTHF	325	G H	GOULD

ED AD 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES WORK.
2 HOURS

CONF	ARR	STAFF

EDPSY 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

CONF	ARR	STAFF

EL ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

CONF	ARR	STAFF

HP ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

CONF	ARR	STAFF

SE ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

CONF	ARR	STAFF

SP ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

CONF	ARR	STAFF

VOTEC 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

CONF	ARR	STAFF

ED AD 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF	ARR	STAFF

EDPSY 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF	ARR	STAFF

EL ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF		ARR					STAFF

HP ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF		ARR					STAFF

SE ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF		ARR					STAFF

SP ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF		ARR					STAFF

VOTEC 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

HP ED 301 PHILOSOPHY OF EDUCATION.
2 HOURS, OR 1/2 UNIT

LECT-DISC		9	TUWTHF	213	G	H	MCMURRAY

HP ED 302 HISTORY OF AMERICAN EDUCATION.
2 HOURS, OR 1/2 UNIT

LECT-DISC		10	TUWTHF	213	G	H	

HP ED 303 COMPARATIVE EDUCATION.
2 HOURS, OR 1/2 UNIT

LECT-DISC		11	TUWTHF	223	G	H	KAULFERS

HP ED 304 SOCIAL FOUNDATIONS OF EDUCATION.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A1	8	TUWTHF	215	G	H	B O SMITH
LECT-DISC	A2	8	TUWTHF	311	G	H	PALMER
LECT-DISC	B	10	TUWTHF	215	G	H	B O SMITH
LECT-DISC	C1	10	TUWTHF	215	G	H	PALMER
LECT-DISC	C2	10	TUWTHF	319	G	H	J R BURNETT
LECT-DISC	D	11	TUWTHF	319	G	H	

HP ED 305 HISTORY OF EDUCATIONAL IDEAS.
2 HOURS, OR 1/2 UNIT
*MEETS FIRST FOUR WEEKS ONLY.

LECT-DISC	A1	8	TUWTHF	331	G	H	CLOPTON
LECT-DISC	B1	9	TUWTHF	331	G	H	
LECT-DISC	B2	9	TUWTHF	207	G	H	KAULFERS
LECT-DISC	*C1	10-12	TUWTHF	207	G	H	MCMURRAY
LECT-DISC	C2	10	TUWTHF	321	G	H	CLOPTON
LECT-DISC	D	11	TUWTHF	311	G	H	

EDPSY 311 PSYCHOLOGY OF LEARNING FOR TEACHERS.
PREREQUISITE--ED. PSY. 211, PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS, OR 1/2 UNIT
*MEET FIRST FOUR WEEKS ONLY.

LECT-DISC	*A1	8-10	TUWTHF	223	G	H	DELLAPIANA
LECT-DISC	A2	8	TUWTHF	2	EDUC		R S JONES
LECT-DISC	B1	9	TUWTHF	327	G	H	KNAPP
LECT-DISC	B2	9	TUWTHF	319	G	H	BLAIR
LECT-DISC	C1	10	TUWTHF	331	G	H	DEBUS
LECT-DISC	C2	10	TUWTHF	223	G	H	GARVERICK
LECT-DISC	D	11	TUWTHF	221	G	H	KNAPP

EDPSY 312 MENTAL HYGIENE AND THE SCHOOL.
PREREQUISITE--ED.PSY. 211, PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	207	G H	GARVERICK
LECT-DISC	B1	9	TUWTHF	205	G H	KACZKOWSKI
LECT-DISC	B2	9	TUWTHF	311	G H	SHOEMAKER
LECT-DISC	C1	10	TUWTHF	311	G H	JEAN PHILLIPS
LECT-DISC	C2	10	TUWTHF	217	G H	NEWLAND
LECT-DISC	D1	11	TUWTHF	331	G H	TOTH
LECT-DISC	D2	11	TUWTHF	215	G H	MOWRER

SP ED 316 THE GIFTED CHILD IN SCHOOL AND SOCIETY.
PREREQUISITE--ED. PSY. 211 OR EL. ED. 236.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	8	TUWTHF	162	EDUC	GALLAGHER

SP ED 317 PSYCHO-SOCIAL EDUCATIONAL ASPECTS OF DEAFNESS.
PREREQUISITE--SP. ED. 117 AND PSYCH. 100 OR ED. PSY. 211.
3 HOURS, OR 1/2 UNIT

LECT-DISC	1-3	W F	385	EDUC	D PHILLIPS

SP ED 318 WORKSHOP AND LABORATORY IN EDUCATION OF EXCEPTIONAL CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
4 TO 8 HOURS, OR 1 TO 2 UNITS
*SECTION A IS FOR MENTALLY RETARDED AND WILL BE OFFERED FOR 8 WEEKS
*SECTION B IS FOR LEARNING DISABILITIES AND WILL BE OFFERED FOR 8 WEEKS
*SECTION C IS GIFTED INSTITUTE AND WILL BE OFFERED FIRST FOUR WEEKS ONLY

LECT-DISC	*A	830-230	TUWTHF	ARR	JORDAN
LECT-DISC	*B	9-3	TUWTHF	210A EDUC	BATEMAN
LECT-DISC	*C	9-3	TUWTHF	ARR	SHAFFER

SP ED 322 PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED, I.
PREREQUISITE--EL. ED. 231, SENIOR STANDING.
3 HOURS, OR 1/2 UNIT

LECT-DISC	1-3	TU TH	162	EDUC	HURLEY

SP ED 324 MENTAL AND EDUCATIONAL MEASUREMENT OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SP. ED. 117, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	3-5	TUWTHF	162	EDUC	COTTRELL

EDPSY 326 INTRODUCTION TO VOCATIONAL REHABILITATION COUNSELING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

CONF	ARR				PATTERSON

EL ED 335 SCIENCE IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 233 AND 237, OR EQUIVALENT, TWO YEARS OF COLLEGE SCIENCE.
3 HOURS, OR 1/2 UNIT

LECT-DISC	10	TUWTHF	4G	EDUC	GOULD
LAB	ARR				

EL ED 336 PRIMARY READING.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	1	EDUC	SHORES
LECT-DISC	B	9	TUWTHF	1	EDUC	

EL ED 337 ART EDUCATION IN THE ELEMENTARY SCHOOL.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 UNIT

LECT-DISC	E	1	TUWTHF	106	F A B	LUMSDEN
LECT-DISC	B	9	TUWTHF	106	F A B	MOOTY

EDPSY 343 INDIVIDUAL INTELLIGENCE TESTING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY AND EITHER SP. ED. 324, OR ED. PSY. 392, OR PSYCH. 290, OR EQUIVALENT.
3 HOURS, OR 1 UNIT

LECT	1-3	TUWTHF	188	EDUC	NEWLAND
LAB	ARR				

VOTEC 384 THE GENERAL SHOP PROGRAM.
PREREQUISITE--SIXTEEN HOURS IN VOCATIONAL AND TECHNICAL EDUCATION.
4 HOURS, OR 1 UNIT

LECT-DISC		9-12	TUWTHF	38	EDUC	LUX

EDPSY 390 ELEMENTS OF EDUCATIONAL STATISTICS.
3 HOURS, OR 1 UNIT

LECT-DISC	A	8-10	TUWTHF	242	EDUC	STAKE
LECT-DISC	B	10-12	TUWTHF	242	EDUC	KAPPAUF

EDPSY 391 CONSTRUCTION AND USE OF TESTS IN TEACHING.
PREREQUISITE--ED. PSY. 211.
2 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC		11	TUWTHF	389	EDUC	GRONLUND

EDPSY 392 INTRODUCTION TO THE PRINCIPLES OF MEASUREMENT.
PREREQUISITE--ED. PSY. 211.
2 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	B	9	TUWTHF	389	EDUC	GRONLUND
LECT-DISC	D	11	TUWTHF	205	G H	ORR

COURSES FOR GRADUATES

HP ED 401 MODERN THEORIES OF EDUCATION.
1 UNIT

LECT-DISC		10	TUWTHF	389	EDUC	STANLEY

HP ED 410 SEMINAR IN THEORIES OF EDUCATIONAL AND SOCIAL CHANGE.
ONLY OPEN TO CANDIDATES FOR THE ED. D. OR PH. D. IN EDUCATION.
1 UNIT

LECT-DISC		1-3	TU TH	389	EDUC	STANLEY, J R BURNETT

EDPSY 411 PSYCHOLOGY OF ADOLESCENCE FOR TEACHERS.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

LECT-DISC		11	TUWTHF	321	G H	BLAIR

EDPSY 412 ADVANCED CHILD DEVELOPMENT FOR STUDENTS OF EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

LECT-DISC		8	TUWTHF	219	G H	DERUS

EDPSY 413 SOCIAL PSYCHOLOGY AND THE PROBLEMS OF EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT
*PRIMARILY FOR STUDENTS IN SCHOOL ADMINISTRATION.

LECT-DISC	*A	8	TUWTHF	319	G H	R SIMPSON
LECT-DISC	B	9	TUWTHF	321	G H	RUNKEL

EDPSY 414 THE PSYCHOLOGY OF COLLEGE TEACHING.
PREREQUISITE--A COURSE IN PSYCHOLOGY, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		10	TUWTHF	307	G H	R SIMPSON

EDPSY 415 PSYCHOLOGICAL THEORIES APPLIED TO EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312, ED. PSY. 411 OR 412, CANDIDACY FOR ED. D. OR PH. D. IN EDUCATION.
1 UNIT

LECT-DISC		1-3	W F	389	EDUC	R S JONES

SP ED 417 PSYCHO-EDUCATIONAL PROBLEMS OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SIXTEEN HOURS OF PSYCHOLOGY AND/OR EDUCATION, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		10-12	TU TH	336	G H	

SP ED 421 ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION.
PREREQUISITE--SP. ED. 417, ED. AD. 460, AND CONSENT OF INSTRUCTOR.
FIELD TRIPS.
1 UNIT

LECT-DISC		10-12	W F	336	G H	

EDPSY 422 BASIC PRINCIPLES OF COUNSELING.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

LECT-DISC	A	8	TUWTHF	192	EDUC	HORGER
LECT-DISC	B	9	TUWTHF	217	G H	ORR
LECT-DISC	D	11	TUWTHF	162	EDUC	OHLSEN

EDPSY 423 THE USE OF TESTS IN GUIDANCE.
PREREQUISITE--ED. PSY. 392.
1 UNIT

LECT-DISC	A	8	TUWTHF	389	EDUC	J PHILLIPS
LECT-DISC	B	9	TUWTHF	2	EDUC	PATTERSON

EDPSY 424 SUPERVISED PRACTICE IN COUNSELING.
PREREQUISITE--MASTERS DEGREE IN GUIDANCE AND
CONSENT OF FACULTY COMMITTEE.
2 UNITS

PRACT	A	ARR		188S	EDUC	BONNEY
PRACT	B	ARR		188S	EDUC	BROPHY

EDPSY 425 PRINCIPLES OF GUIDANCE.
*CREDIT IS NOT GIVEN IN BOTH ED. PSY. 325 AND 425.
*1 UNIT

LECT-DISC	A	8	TUWTHF	213	G H	TOTH
LECT-DISC	C	9	TUWTHF	219	G H	E W ANDERSON
LECT-DISC	D	11	TUWTHF	219	G H	KACZKOWSKI

EDPSY 426 DIAGNOSTIC AND REMEDIAL PROGRAMS OF THE SCHOOL.
1 UNIT

LECT-DISC	B	9	TUWTHF	162	EDUC	W EVANS
LECT-DISC	C	10	TUWTHF	162	EDUC	WALKER

EDPSY 427 PRINCIPLES AND TECHNIQUES OF GROUP GUIDANCE.
PREREQUISITE--ED. PSY. 311, 312, 422, 423, AND EITHER 325 OR 425, OR
CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	A	8-10	TUWTHF	188S	EDUC	OHLSEN
LECT	B	10	TUWTHF	188S	EDUC	HORGER
LAB	B	ARR				

EDPSY 428 THE ANALYSIS AND USE OF OCCUPATIONAL INFORMATION IN GUIDANCE
PROGRAMS.
PREREQUISITE--ED. PSY. 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		8	TUWTHF	321	G H	SHOEMAKER

EDPSY 429 FIELD INSTRUCTION IN COUNSELING.
PREREQUISITE--ED. PSY. 422 AND 424--WITH CONSENT OF INSTRUCTOR
ED. PSY. 424 MAY BE TAKEN CONCURRENTLY.
1 OR 2 UNITS

CONF		ARR				PATTERSON

ED AD 430 ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION.
PREREQUISITE--EL. ED. 431 AND 439.
1 UNIT
MEETS FIRST FOUR WEEKS ONLY.

LECT-DISC		9-11	TUWTHF	173	ARMORY	BARNES

EL ED 431 ELEMENTARY SCHOOL CLASSROOM PROGRAMS.
1 UNIT
*MEETS FIRST FOUR WEEKS ONLY.

LECT-DISC	*A1	8-10	TUWTHF	385	EDUC	STENDLER
LECT-DISC	A2	8	TUWTHF	329	G H	MANOLAKES
LECT-DISC	B	9	TUWTHF	329	G H	FERRIS
LECT-DISC	D	11	TUWTHF	329	G H	JOHNSON

EL ED 433 CURRICULUM PROBLEMS AND TRENDS IN SPECIAL FIELDS OF ELEMENTARY EDUCATION.

PREREQUISITE--EL. ED. 431, LANGUAGE ARTS SECTION--EL. ED. 336 OR A COURSE IN THE TEACHING OF READING OR LANGUAGE ARTS, OR CONSENT OF INSTRUCTOR, CREATIVE ARTS SECTION--EL. ED. 337 OR CONSENT OF INSTRUCTOR, SCIENCE SECTION--EL. ED. 335 OR A METHODS COURSE IN TEACHING SCIENCE IN THE ELEMENTARY SCHOOL AND TWO YEARS OF COLLEGE SCIENCE, OR CONSENT OF INSTRUCTOR.

1 UNIT

*SECTION A1 IS FOR SCIENCE

*SECTIONS A2 AND C ARE FOR SOCIAL STUDIES

*SECTIONS B AND D2 ARE FOR LANGUAGE ARTS

*SECTION D1 IS FOR ARITHMETIC

LECT-DISC	*A1	8	TUWTHF	4G	EDUC		R W BURNETT
LECT-DISC	*A2	8	TUWTHF	205	G H		CHALTAS
LECT-DISC	*B	9	TUWTHF	325	G H		JOHNSON
LECT-DISC	*C	10	TUWTHF	2	EDUC		MCGILL
LECT-DISC	*D1	11	TUWTHF	217	G H		DENIS
LECT-DISC	*D2	11	TUWTHF	385	EDUC		W EVANS

EL ED 434 PROGRAMS IN EARLY CHILDHOOD EDUCATION.

PREREQUISITE--EL. ED. 431.

1 UNIT

LECT-DISC		11	TUWTHF	325	G H		

EL ED 437 METHODS OF CHILD STUDY.

PREREQUISITE--ED. PSY. 312 OR CONSENT OF INSTRUCTOR.

1 UNIT

LECT-DISC		9	TUWTHF	192	EDUC		DENIS

ED AD 438 INSTRUCTIONAL SUPERVISION.

PREREQUISITE--EL. ED. 439, AND ED. AD. 430 OR 440.

1 UNIT

LECT-DISC		8	TUWTHF	217	G H		MCGILL

EL ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.

1 UNIT

LECT-DISC	C	10	TUWTHF	327	G H		SHORES
LECT-DISC	D	11	TUWTHF	327	G H		FERRIS

SE ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.

1 UNIT

LECT-DISC	A	8	TUWTHF	16	EDUC		HAND
LECT-DISC	C	10	TUWTHF	192	EDUC		DEBOER

ED AD 440 ADMINISTRATION AND SUPERVISION OF JUNIOR AND SENIOR HIGH SCHOOLS.

PREREQUISITE--ED. AD. 460 OR CONSENT OF INSTRUCTOR.

1 UNIT

*MEETS FIRST FOUR WEEKS ONLY.

LECT-DISC	*A	9-11	TUWTHF	172	ARMORY		HENCLEY
LECT-DISC	D	11	TUWTHF	192	EDUC		HAND

SE ED 441 LINGUISTIC AND LOGICAL ANALYSIS OF TEACHING.

1 UNIT

LECT-DISC		10	TUWTHF	16	EDUC		K HENDERSON

SE ED 448 CONTINUING EDUCATION.

1/2 OR 1 UNIT

MEETS FIRST FOUR WEEKS ONLY

LECT-DISC		1-3	TUWTHF	33	EDUC		PHIPPS

ED AD 449 INDEPENDENT STUDY.

*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.

*1/2 OR 1 UNIT

CONF		ARR					GRADUATE STAFF

EDPSY 449 INDEPENDENT STUDY.

*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.

*1/2 OR 1 UNIT

CONF		ARR					GRADUATE STAFF

EL ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

CONF	ARR				GRADUATE STAFF

HP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

CONF	ARR				GRADUATE STAFF

SE ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

CONF	ARR				GRADUATE STAFF
CONF	ARR				GRADUATE STAFF

VOTEC 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

CONF	ARR				GRADUATE STAFF

VOTEC 450 EVALUATION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

LECT-DISC	1-4	TUWTHF	25	EDUC	MATHER

VOTEC 451 SUPERVISION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC	8-11	TUWTHF	25	EDUC	MATHER

EL ED 455 THEORIES OF ART EDUCATION.
PREREQUISITE--EL. ED. 337 OR SE ED 456, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	11	TUWTHF	133	F A B	MOOTY

SE ED 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.
1 UNIT
*SECTION A IS FOR MATHEMATICS
*SECTION B IS FOR SOCIAL STUDIES
*SECTION C IS FOR ENGLISH
*SECTION D IS FOR SCIENCE

LECT-DISC *A	8	TUWTHF	10	EDUC	K HENDERSON
LECT-DISC *B	10	TUWTHF	10	EDUC	METCALF
LECT-DISC *C	9	TUWTHF	10	EDUC	DEBOER
LECT-DISC *D	9	TUWTHF	4G	EDUC	R W BURNETT

VOTEC 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.
1 UNIT
*SECTION A IS FOR AGRICULTURAL EDUCATION AND MEETS FIRST FOUR WEEKS
*SECTION B IS FOR BUSINESS EDUCATION AND MEETS EIGHT WEEKS
*SECTION C IS FOR HOME ECON EDUCATION AND MEETS FIRST FOUR WEEKS

LECT-DISC *A	3-5	TUWTHF	33	EDUC	STAFF
LECT-DISC *B	9	TUWTHF	10	D K H	CONDON
LECT-DISC *C	1-4	TUWTHF	25	EDUC	E SIMPSON

EL ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1/2 OR 1 TO 2 UNITS
*SECTION A IS FOR READING AND MEETS FIRST FOUR WEEKS. DESIGNED TO GIVE DIRECT HELP ON THE PROBLEMS WHICH LOCAL SCHOOLS FACE IN ORGANIZING READING PROGRAMS AND IN TEACHING READING. WILL SERVE TO BRING ADMINISTRATORS AND TEACHERS UP TO DATE ON RECENT TRENDS AND DEVELOPMENTS IN METHODS AND MATERIALS, RESEARCH, AND CURRENT EXPERIMENTATION IN TEACHING READING.

*SECTION B IS FOR CREATIVE WRITING AND MEETS SECOND FOUR WEEKS. THIS WORKSHOP WILL EMPHASIZE THE DEVELOPMENT OF CREATIVE WRITING SKILLS IN THE MIDDLE GRADES AND WILL INCLUDE THE STUDY OF RECENT RESEARCH AND THE ANALYSIS OF TRENDS IN PRESENT-DAY PROGRAMS, INSTRUCTIONAL METHODS AND MATERIALS.

*SECTION C IS FOR ELEMENTARY STUDENT TEACHING SUPERVISORS AND MEETS SECOND FOUR WEEKS. THIS WORKSHOP IS ESPECIALLY DESIGNED FOR CLASSROOM TEACHERS AND PRINCIPALS WHO WORK WITH OR ARE PLANNING TO WORK WITH STUDENT TEACHERS. THE WORKSHOP WILL FOCUS ON THE IMPROVEMENT OF SUPERVISION THROUGH THE STUDY AND ANALYSIS OF SUPERVISORY ACTIVITIES, I.E., CURRICULUM SUPERVISION, CONFERENCES, DEMONSTRATION TEACHING, AND EVALUATION.

*SECTION D IS FOR ARITHMETIC AND MEETS FIRST FOUR WEEKS. THIS WORKSHOP FOCUSES ON MODERN DEVELOPMENTS IN THE ELEMENTARY SCHOOL ARITHMETIC PROGRAM AND THE IMPROVEMENT OF TEACHING OF ARITHMETIC. BASIC MATHEMATICAL UNDERSTANDINGS AND CONCEPTS FOR IMPROVED TEACHING METHODS AND MATERIALS WILL BE STRESSED.

*SECTION E IS FOR CURRICULUM DEVELOPMENT IN TEACHER EDUCATION. THIS WORKSHOP IS DESIGNED FOR STUDENTS CENTRALLY CONCERNED WITH TEACHER-EDUCATION PROGRAM DEVELOPMENT. ATTENTION WILL BE GIVEN TO SUCH MAJOR COMPONENTS AS GENERAL, SPECIALIZED, AND PROFESSIONAL EDUCATION. OPPORTUNITIES FOR SYSTEMATIC STUDY OF THE BASES FOR CURRICULUM DEVELOPMENT IN TEACHER EDUCATION AND FOR THE CAREFUL ANALYSES OF EXISTING AND EXPERIMENTAL PROGRAMS WILL BE PROVIDED.

*SECTION F IS FOR INQUIRY TRAINING AND MEETS FOR THE FIRST FOUR WEEKS. OPEN ONLY TO STUDENTS APPROVED BY ADVANCE APPLICATION.

1 UNIT	LECT-DISC	*A	9-1130	TUWTHF	18	G H		MOORE
		*A	130-3	TUWTHF	18	G H		
1 UNIT	LECT-DISC	*B	9-1130	TUWTHF	18	G H		MOORE
		*B	130-3	TUWTHF	18	G H		
1 UNIT	LECT-DISC	*C	9-1130	TUWTHF	33	EDUC		CHALTAS
		*C	130-3	TUWTHF	33	EDUC		
1 UNIT	LECT-DISC	*D	9-1130	TUWTHF	305	G H		C PHILLIPS
		*D	130-3	TUWTHF	305	G H		
1 UNIT	LECT-DISC	*E	11	TUWTHF	1	EDUC		MANOLAKES
1 UNIT	LECT-DISC	*F	9-12	TUWTHF	ARR			SUCHMAN AND STAFF

SE ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1/2 OR 1 TO 2 UNITS

*SECTION A IS FOR STUDENTS ENROLLED IN NATIONAL SCIENCE FOUNDATION ECONOMICS INSTITUTE. MEETS JUNE 22 THRU AUGUST 1.

*SECTION B IS RESTRICTED TO NATIONAL SCIENCE FOUNDATION MATHEMATICS PROGRAM. JUNE 29 THRU AUGUST 7.

1 1/2 UNITS	LECT-DISC	*A	8-1030	MTUWTHF	328	ARMORY		PADEN
1/2 UNIT	LECT-DISC	*B	830-1130	MTUWTHF	ARR			STAFF
		*B	130-4	MTUWTH	ARR			STAFF

VOTEC 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1/2 OR 1 TO 2 UNITS

*SECTION A MEETS FIRST FOUR WEEKS. A STUDY OF COOPERATIVE EXTENSION EDUCATION, ITS METHODS, PHILOSOPHIES AND EDUCATIONAL CHARACTERISTICS AS DISTINGUISHED FROM FORMAL EDUCATION. THE MAJOR EMPHASIS IS UPON UNDERSTANDING THE TEACHING-LEARNING PROCESS AS IT APPLIES TO ADULT LEARNING. THE PSYCHOLOGICAL PRINCIPLES OF ADULT MOTIVATION AND GROUP DYNAMICS ARE DEVELOPED AND EMPHASIZED.

*SECTION B IS FOR OFFICE AUTOMATION AND MEETS THE FIRST FOUR WEEKS. WILL STUDY THE BASIC CONCEPTS OF OFFICE AUTOMATION, IDENTIFY ITS NATURE, FUNCTIONS, PROBLEMS, AND TRENDS, CONSIDER ITS RELATIONSHIP TO OTHER SUBJECT MATTER IN THE FIELD OF OFFICE PROCEDURES, AND INVESTIGATE POINTS OF VIEW IN CURRICULUM DEVELOPMENT, INCLUDING GRADE LEVEL AND CONTENT OF INSTRUCTION. KEY PUNCH AND PUNCH TAPE EQUIPMENT WILL BE AVAILABLE FOR STUDY AND PRACTICE. ENROLLMENT LIMITED. CONSENT OF INSTRUCTOR REQUIRED.

*SECTION C IS FOR ELECTRICITY AND ELECTRONICS AND MEETS FIRST FOUR WEEKS. A THEORY AND LABORATORY WORKSHOP, USING INDIVIDUAL AND SMALL GROUP INSTRUCTION TO INCREASE KNOWLEDGES AND SKILLS IN THE ELECTRICITY AND ELECTRONICS AREAS OF INDUSTRIAL EDUCATION.

*SECTION D MEETS SECOND FOUR WEEKS AND IS ESPECIALLY DESIGNED FOR HOME ECONOMICS TEACHERS WHO ARE PREPARING TO TEACH FOR EMPLOYMENT IN HOME ECONOMICS. THIS TREND WILL BE THOROUGHLY EXPLORED AND CURRICULUM MATERIALS PREPARED.

1/2 UNIT	LECT-DISC	*A	8-10	TUWTHF	28	EDUC		E W ANDERSON
1 UNIT	LECT-DISC	*B	10-3	TUWTHF	3	D K H		
					12	D K H		MELSON
1 UNIT	LECT-DISC	*C	1-5	TUWTHF	38	EDUC		PORTER
1 UNIT	LECT-DISC	*D	8-11	TUWTHF	25	EDUC		E SIMPSON

ED AD 460 PUBLIC CONTROL AND ADMINISTRATION OF EDUCATION.
NOT OPEN TO EXPERIENCED ADMINISTRATORS OR TO ANY STUDENTS WHO HAVE TAKEN ANY OF THE FOLLOWING COURSES--OR EQUIVALENT--ED. AD. 430, 440, 461, 462, 464, 465, 466.
1 UNIT

LECT-DISC	A	8	TUWTHF	305	G H	
LECT-DISC	C	10	TUWTHF	205	G H	

ED AD 461 ADMINISTRATION OF EDUCATIONAL PROGRAMS AND PERSONNEL.
PREREQUISITE--ED. AD. 460, ED. AD. 430 OR 440.
1 UNIT

LECT-DISC		11-3	TU TH	307	G H	MCCLEARY

ED AD 462 FINANCIAL AND OPERATING STRUCTURES OF PUBLIC EDUCATION.
PREREQUISITE--ED. AD. 461.
1 UNIT

LECT-DISC		11-3	TU TH	304	G H	

ED AD 464 FIELD PROBLEMS IN EDUCATIONAL ADMINISTRATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 OR 2 UNITS
*MEETS SECOND FOUR WEEKS ONLY.

LECT-DISC	*A	9-12	TUWTHF	172	ARMORY	HENCLEY
LECT-DISC	*B	9-12	TUWTHF	173	ARMORY	BARNES

ED AD 466 PUBLIC SCHOOL FINANCE.
PREREQUISITE--ED. AD. 460, 430, OR 440, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC		9	TUWTHF	304	G H	MCLURE

ED AD 468 SCHOOL-COMMUNITY RELATIONS.
1 UNIT

LECT-DISC		11	TUWTHF	213	G H	

ED AD 469 LEGAL BASIS OF SCHOOL ADMINISTRATION.
1 UNIT

LECT-DISC		10	TUWTHF	219	G H	SUMPTION

VOTEC 471 POLICY AND POLICY MAKING FOR PUBLIC SCHOOL EDUCATION IN AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277. OPEN TO SCHOOL ADMINISTRATORS WITHOUT PREREQUISITES.
1/2 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC		8-10	TUWTHF	33	EDUC	WARMBROD

VOTEC 473 VOCATIONAL EDUCATION IN AGRICULTURE FOR ADULTS.
PREREQUISITE--VO. TEC. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC		10-12	TUWTHF	33	EDUC	HEMP

VOTEC 476 GUIDANCE IN AGRICULTURAL EDUCATION.
PREREQUISITE--VO. TEC. 276 AND 277.
1/2 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC		1-3	TUWTHF	28	EDUC	KREBS

VOTEC 481 HISTORY AND BASIC CONCEPTS OF VOCATIONAL EDUCATION.
1 UNIT
MEETS FIRST FOUR WEEKS

LECT-DISC		1-3	TUWTHF	1	EDUC	TOMLINSON

VOTEC 488 CURRICULUM PROBLEMS AND TRENDS IN INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

LECT-DISC		1-3	TUWTHF	1	EDUC	KARNES

ED AD 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION
FOR THE DEGREES OF PH.D. OR ED.D.
1 OR 2 UNITS

LECT-DISC	ARR				MCCLEARY

EL ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION
FOR THE DEGREES OF PH.D. OR ED.D.
1 OR 2 UNITS

CONF	ARR				GRADUATE STAFF

SE ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION
FOR THE DEGREES OF PH.D. OR ED.D.
1 OR 2 UNITS

LECT-DISC	11	TUWTHF	10C	EDUC	METCALF

VOTEC 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION
FOR THE DEGREES OF PH.D. OR ED.D.
1 OR 2 UNITS

CONF	ARR				GRADUATE STAFF

ED AD 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

EDPSY 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

EL ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

HP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

SE ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

SP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

VOTEC 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

CONF	ARR				GRADUATE STAFF

EDPSY 496 STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. PSY. 390.
1 UNIT

LECT-DISC	11	TUWTHF	2	EDUC	PINGRY
LAB	1-3	TUW F	242	EDUC	PINGRY

EDPSY 497 ADVANCED STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. PSY. 496.
1 UNIT

LECT-DISC	11	TUWTHF	111	G H	FRANKMANN
LAB	ARR				

ED AD 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

EDPSY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

EL ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

HP ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

SE ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

SP ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

VOTEC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
CONF ARR GRADUATE STAFF

ELECTRICAL ENGINEERING

DEPARTMENT OFFICE 158 E E B

COURSES FOR UNDERGRADUATES

E E 114 WIRING AND ILLUMINATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
*ENGINEERING STUDENTS RECEIVE NO CREDIT.
*3 HOURS

DISC	A	8-10	TU TH S	151	E E B

COURSES FOR ADVANCED UNDERGRADUATES

E E 220 BASIC ELECTRICAL ENGINEERING.
PREREQUISITE--PHYSICS 106 AND 107, AND MATH 143.
3 HOURS

DISC	A	8	MTUWTHF	136	E E B
	A	1	TU	136	E E B
DISC	B	9	MTUWTHF	136	E E B
	B	1	M	136	E E B

E E 229 INTRODUCTION TO ELECTROMAGNETIC FIELDS.
PREREQUISITE--PHYCS. 107, T.A.M. 154, MATH. 345, CREDIT OR REGISTRATION IN E.E. 250.
3 HOURS

DISC	A	10	MTUWTHF	168	E E B
	A	1	TH	168	E E B
DISC	B	11	MTUWTHF	168	E E B
	B	1	TH	168	E E B

E E 230 APPLICATION AND CONTROL OF MOTORS AND EQUIPMENT.
PREREQUISITE--E E 22C.
2 HOURS

DISC	A	8	MTUWTH	161	E E B

E E 231 POWER EQUIPMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E E 230.
1 HOUR

LAB	A	2-5	M W	50M	E E B

E E 234 ELECTRICAL INSTRUMENTS AND MEASUREMENTS.
PREREQUISITE--E E 220.
2 HOURS

DISC	A	10	MTUWTH	161	E E B

E E 235 ELECTRICAL MEASUREMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 234.
1 HOUR

LAB	A	2-5	TU TH	137	E E B

E E 250 LINEAR NETWORK THEORY I.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN E. E. 251, MATH. 195 AND 345.
5 HOURS

DISC	A	8-10	MTUWTHF	168	E E B

E E 251 CIRCUIT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 250.
1 HOUR

LAB	A	2-5	M W	146	E E B
LAB	B	2-5	TU TH	146	E E B

E E 271 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

DISC	I	ARR			

E E 272 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

DISC	I	ARR			

E E 288 ECONOMIC ASPECTS OF ENGINEERING.
SAME AS G. E. 288.
PREREQUISITE--JUNIOR STANDING IN ENGINEERING, ECON. 108 OR CONSENT OF INSTRUCTOR.
3 HOURS

DISC	A	9	MTUWTHF	260	E E B
	A	1	TU	260	E E B
DISC	B	10	MTUWTHF	260	E E B
	B	1	W	260	E E B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

E E 322 LINEAR NETWORK THEORY, 11.
PREREQUISITE--E. E. 250, 251, MATH. 195,345.
4 HOURS, OR 0 TO 1 UNIT

DISC	A	8-10	MTUWTH	170	E E B

E E 323 CIRCUIT LABORATORY.
PREREQUISITE--E. E. 250 AND 251, CREDIT OR REGISTRATION IN E. E. 322 AND 350.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	132	E E B

E E 330 MAGNETIC CIRCUITS AND TRANSFORMERS.
PREREQUISITE--E.E. 229, 250, 251, CREDIT OR REGISTRATION IN E.E. 331
3 HOURS, OR 0 OR 3/4 UNIT

DISC	A	11	MTUWTHF	169	E E B
	A	1	TH	169	E E B

E E 331 MAGNETIC CIRCUITS AND TRANSFORMER LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 330.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	50K	E E B
LAB	B	2-5	TU TH	50K	E E B
LECT	M	1	W F	169	E E B

E E 332 ELECTRICAL MACHINERY.
PREREQUISITE--E E 330 AND 331, CREDIT OR REGISTRATION IN E E 333.
3 HOURS, OR 0 OR 3/4 UNIT

DISC	A	8	MTUWTHF	169	E E B
	A	1	F	269	E E B
DISC	B	9	MTUWTHF	169	E E B
	B	1	F	269	E E B

E E 333 ELECTRICAL MACHINERY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 332.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	50F	E E B
LAB	B	2-5	TU TH	50F	E E B

E E 340 ELECTRONICS.
PREREQUISITE--E. E. 250 AND 251.
3 HOURS, OR 0 OR 3/4 UNIT

DISC	A	10	MTUWTHF	163	E E B
	A	1	M	168	E E B

E E 341 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 340.
1 HOURS, OR 0 OR 1/4 UNIT

LAB	A	2-5	TU TH	235	E E B

E E 342 ADVANCED ELECTRONICS.
PREREQUISITE--E. E. 322, 340 AND 341.
3 HOURS, OR 0 OR 3/4 UNIT

DISC	A	11	MTUWTHF	269	E E B
	A	1	TH	269	E E B
DISC	B	1	MTUWTHF	163	E E B
	B	11	TH	163	E E B

E E 343 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 342.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	M W	238	E E B
LAB	B	2-5	TU TH	238	E E B
LAB	C	9-12	M W	238	E E B

E E 350 LINES, FIELDS, AND WAVES.
PREREQUISITE--E. E. 299, MATH. 195, CREDIT OR REGISTRATION IN
E. E. 323.
3 HOURS OR 3/4 UNIT

DISC	A	10	MTUWTHF	269	E E B
	A	1	W	269	E E B

E E 355 FIELDS AND WAVES.
PREREQUISITE--E.E. 229 AND 350, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 3/4 UNIT

DISC	A	8	MTUWTHF	141	E E B
	A	1	W	141	E E B

E E 356 MICRO WAVE TECHNIQUES.
PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 355.
1 HOUR, OR 0 OR 1/4 UNIT

LAB	A	2-5	TU TH	251	E E B

E E 381 PULSE TECHNIQUES.
PREREQUISITE--E. E. 322, 340, AND 341, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH E. E. 347 AND E. E. 381.
*4 HOURS, OR 0 OR 1 UNIT

DISC	A	10	MTUWTHF	133	E E B
	A	1	W	133	E E B
LAB	A	2-5	M W	234	E E B

E E 382 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT

DISC	A	9	MTUWTHF	335	E E B
	A	1	TU	335	E E B
LAB	A	2-5	TU TH	241	E E B

E E 383 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

DISC	A	9	MTUWTHF	335	E E B
	A	1	TU	335	E E B

E E 388 ELECTRONIC ANALOG COMPUTERS.
PREREQUISITE--E.E. 340, 341, MATH. 345 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 1 UNIT

DISC	A	11	MTUWTHF	170	E E B
	A	1	TH	170	E E B
LAB	A	ARR		261	E E B

COURSES FOR GRADUATES

E E 416 ANALYSIS OF LINEAR NETWORKS AND SYSTEMS.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 346 OR 348, E.E. 322 OR EQUIVALENT.
1 UNIT

LECT	A	9	MTUWTHF	141	E E B
	A	1	TU	141	E E B
LECT	B	10	MTUWTHF	141	E E B
	B	1	TU	141	E E B

E E 420 ELECTROMAGNETIC WAVES AND RADIATING SYSTEMS.
1 UNIT

LECT	A	8	MTUWTHF	269	E E B
	A	1	M	269	E E B
LECT	B	9	MTUWTHF	269	E E B
	B	1	TU	269	E E B

E E 422 ADVANCED COMMUNICATION NETWORKS.
1 UNIT

LECT	A	11	MTUWTHF	260	E E B
	A	1	TH	260	E E B

E E 429 VACUUM TUBE CIRCUIT ANALYSIS.
1 UNIT

LECT	A	10	MTUWTHF	170	E E B
	A	1	W	170	E E B

E E 498 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN ELECTRICAL ENGINEERING.
1/2 TO 2 UNITS
*SECTION B RESTRICTED TO STUDENTS ENROLLED IN UI-NSF INSTITUTE IN ENGINEERING TECHNOLOGY

LECT-DISC	*B	11	MTUWTHF	234	E E B
LAB	*B	8-11	TU TH	234	E E B
DISC	I	ARR			

E E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF		ARR

ENGLISH LITERATURE AND AMERICAN LITERATURE

DEPARTMENT OFFICE 100 E B

MAJOR--A COURSE IN SHAKESPEARE AND TWENTY ADDITIONAL HOURS IN ENGLISH--EXCLUDING ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND RHET. 101, 102, 107, 108, 151, 200, 271, 272. OF THESE TWENTY ADDITIONAL HOURS, SEVENTEEN MUST BE TAKEN IN ENGLISH OR AMERICAN LITERATURE, INCLUDING THREE HOURS FROM EACH OF THE FOLLOWING GROUPS-1--AMERICAN LITERATURE-ENGLISH 255, 256-A STUDENT WHO HAS CREDIT FOR ENGLISH 113 OR 114 MAY OFFER ENGLISH 272, 273, 287, 288, 316, 352, 353, 354, 359, 375, 376, 377, OR 380. 2--ENGLISH LITERATURE PRIOR TO 1688-ENGLISH 221, 235, 311, 320, 325, 326, 342, 345. 3--ENGLISH LITERATURE, 1688-1800,-ENGLISH 245, 346, 348, 349. 4--ENGLISH LITERATURE, 1800-PRESENT-ENGLISH 246, 263, 264, 265, 266, 281, 282, 283, 284, 382.

FOR UNDERGRADUATE STUDENTS WHO CONTEMPLATE TAKING ADVANCED WORK OR ARE MAJORING IN ENGLISH, THE FOLLOWING SEQUENCES OF COURSES ARE SUGGESTED. FRESHMAN YEAR, FIRST SEMESTER, ENGLISH 101 OR RHETORIC 107-SECOND SEMESTER, ENGLISH 102 OR 103 OR RHETORIC 108. SOPHOMORE YEAR, FIRST SEMESTER, ENGLISH 105 OR ENGLISH 121-SECOND SEMESTER ENGLISH 106 OR ENGLISH 122. ENGLISH 101 AND EITHER 102 OR 103, OR RHETORIC 107 AND 108 ARE THE NORMAL PREREQUISITE TO THE ENGLISH MAJOR. IF NECESSARY, ENGLISH 101, 102, OR 103 MAY BE TAKEN CONCURRENTLY WITH ADVANCED COURSES. IN EXCEPTIONAL CASES, ENGLISH 105 AND 106 OR ENGLISH 121 AND 122 MAY BE ACCEPTED AS ALTERNATIVE PREREQUISITES TO THE MAJOR.

MINORS--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC-NOT INCLUDING APPLIED MUSIC-COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THEIR DEPARTMENTS EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

ENGLISH MAJORS WHO INTEND TO TEACH IN SECONDARY SCHOOLS MUST SEE THE ADVISER ON SPECIAL CURRICULA.

DEPARTMENTAL DISTINCTION--A STUDENT MAJORING IN ENGLISH WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT--4.0 OR HIGHER--MAY EARN DISTINCTION ONLY BY SUCCESSFULLY COMPLETING ENGLISH 297 AND 298 IN ADDITION TO THE REGULAR REQUIREMENTS FOR HIS MAJOR. A STUDENT ENROLLED IN THE TEACHER TRAINING CURRICULUM IN ENGLISH MAY SUBSTITUTE ENGLISH 295 OR 296 FOR ONE SEMESTER OF THE ENGLISH 297-298 SEQUENCE PROVIDED THAT HIS ADVISER APPROVES AND THAT HIS SCHEDULE MAKES SUCH SUBSTITUTION NECESSARY. THE LEVEL OF DISTINCTION--DISTINCTION, HIGH DISTINCTION, OR HIGHEST DISTINCTION--IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THE COURSE AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR. TO RECEIVE HIGHEST DISTINCTION HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF, IN THE OPINION OF THE INSTRUCTORS IN ENGLISH 297 AND 298 AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

MAJOR IN COMPOSITION--SEE RHETORIC AND COMPOSITION.

NOTE--BEGINNING IN THE SECOND SEMESTER TIME TABLE, THE ENGLISH AND AMERICAN LITERATURE COURSES WILL BE INTEGRATED.

COURSES FOR UNDERGRADUATES

ENGL 102 INTRODUCTION TO THE DRAMA.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	C	10	MTUWTHF	201	E B	LOFTUS
	C	12	W	201	E B	

ENGL 103 INTRODUCTION TO FICTION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	E	1	MTUWTHF	117	E B	STEWART
	E	12	F	117	E B	

ENGL 113 CLASSIC AMERICAN AUTHORS BEFORE THE CIVIL WAR.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 113 IN ADDITION TO ENGL. 255.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	117	E B	HAMILTON
	A	12	M	119	E B	

ENGL 114 CLASSIC AMERICAN AUTHORS AFTER THE CIVIL WAR TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 114 IN ADDITION TO ENGL. 256.
*3 HOURS

LECT-DISC	B	9	MTUWTHF	201	E B	HAMILTON
	B	12	TU	201	E B	

ENGL 121 CHIEF ENGLISH WRITERS BEFORE 1800.
PREREQUISITE--SOPHOMORE STANDING, OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 121 IN ADDITION TO ENGL. 105.
*3 HOURS

LECT-DISC	C	10	MTUWTHF	201	E B	HINELY
	C	12	W	201	E B	

ENGL 122 CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 122 IN ADDITION TO ENGL. 106.
*3 HOURS

LECT-DISC	D	11	MTUWTHF	117	E B	CLARKE
	D	12	TH	117	E B	

ENGL 123 CHIEF MODERN ENGLISH WRITERS.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

LECT-DISC	E	1	MTUWTHF	201	E B	BRANDABUR
	E	12	F	201	E B	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 246 THE ENGLISH ROMANTIC POETS.
3 HOURS

LECT-DISC	B	9	MTUWTHF	205	E B	STILLINGER
	B	12	TU	205	E B	

ENGL 255 SURVEY OF AMERICAN LITERATURE, I.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 113 AND 255.
*3 HOURS

LECT-DISC	F	2	MTUWTHF	117	E B	BOGART
	F	3	M	117	E B	

ENGL 256 SURVEY OF AMERICAN LITERATURE, II.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 114 AND 256.
*3 HOURS

LECT-DISC	D	11	MTUWTHF	205	E B	MOAKE
	D	12	W	205	E B	

ENGL 257 SURVEY OF ENGLISH LITERATURE, I.
PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	C	10	MTUWTHF	205	E B		KAUFMANN
	C	12	TH	205	E B		

ENGL 258 SURVEY OF ENGLISH LITERATURE,II.
PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	E	1	MTUWTHF	205	E B		WILKIE
	E	12	F	205	E B		

ENGL 283 ENGLISH LITERATURE IN THE TWENTIETH CENTURY, I.
3 HOURS

LECT-DISC	F	2	MTUWTHF	108	E B		WASSON
	F	12	TH	108	E B		

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 325 ENGLISH LITERATURE FROM 1500 TO 1660.
3 HOURS, OR 3/4 UNIT

LECT-DISC	C	10	MTUWTHF	112	E B		MILLIGAN
	C	12	W	112	E B		

ENGL 345 THE METAPHYSICAL POETS.
3 HOURS, OR 3/4 UNIT

LECT-DISC	B	9	MTUWTHF	43	G H		ORNSTEIN
	B	12	TU	43	G H		

ENGL 351 THE MID-VICTORIAN NOVEL.
3 HOURS, OR 3/4 UNIT

LECT-DISC	D	11	MTUWTHF	112	E B		MILLET
	D	12	M	112	E B		

ENGL 352 AMERICAN LITERATURE--IRVING TO WHITMAN.
3 HOURS, OR 3/4 UNIT

LECT-DISC	B	9	MTUWTHF	112	E B		BOGART
	B	12	TH	112	E B		

COURSES FOR GRADUATES

ENGL 401 OLD ENGLISH--ANGLO SAXON.
1 UNIT

LECT-DISC	B	9	MTUWTHF	117	E B		SMITH
	B	12	M	117	E B		

ENGL 403 HISTORY OF THE ENGLISH LANGUAGE.
1 UNIT

LECT-DISC	C	10	MTUWTHF	117	E B		SMITH
	C	12	TU	117	E B		

ENGL 413 STUDIES IN SHAKESPEARE.
1 UNIT

LECT-DISC	E	1-3	TU F	43	G H		ORNSTEIN

ENGL 428 STUDIES IN THE ROMANTIC MOVEMENT, II.
1 UNIT

LECT-DISC	E	1-3	M TH	112	E B		STILLINGER

ENGL 432 STUDIES IN VICTORIAN LITERATURE II.
1 UNIT

LECT-DISC	V	7-9PM	TU TH	112	E B		SMALLEY

ENGL 438 STUDIES IN AMERICAN LITERATURE AFTER 1800.
PREREQUISITE--SURVEY COURSE IN AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
1 UNIT
TOPIC--AMERICAN LITERATURE AFTER THE CIVIL WAR.

LECT-DISC	B	9	MTUWTH	108	E B	ALTENBERND

ENGL 445 INTRODUCTION TO ADVANCED GRADUATE STUDY.
REQUIRED OF ALL CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGLISH.
1/4 UNIT

LECT-DISC	C	10	MTUW	108	E B	HAIG

ENGL 447 BACKGROUND MATERIALS FOR HIGH SCHOOL TEACHERS OF ENGLISH.
PREREQUISITE--ACCEPTANCE AS PARTICIPANT IN THE INSTITUTE FOR SECONDARY TEACHERS OF ENGLISH.
2 UNITS
STUDENTS MUST REGISTER FOR TWO SECTIONS FROM A, B, OR C, AND THE AFTERNOON SESSION.
SECTION A-LITERATURE
SECTION B-RHETORIC
SECTION C-LANGUAGE

LECT-DISC	A	8	MTUWTH	C	LAW	ROBINS
LECT-DISC	B	9	MTUWTH	C	LAW	MOAKE
LECT-DISC	C	10	MTUWTH	C	LAW	YOUMANS
LAB	E	1-3	MTUWTH	C	LAW	HOOK

ENGL 488 PROBLEMS IN AMERICAN LITERATURE AND CULTURE.
PREREQUISITE--A SURVEY OF AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY REPEAT COURSE FOR CREDIT.
*1 UNIT
TOPIC--POE AND HAWTHORNE.

LECT-DISC	A	8	MTUWTH	108	E B	DAVIDSON

ENGL 491 RESEARCH IN SPECIAL TOPICS.
*THIS COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS OF CREDIT.
*1 UNIT

CONF		ARR	MILLET

ENGL 497 INDEPENDENT READING.
PREREQUISITE--CONSENT OF INSTRUCTOR OF CONCURRENT 300 LEVEL COURSE.
*STUDENTS MAY ACCUMULATE 1/2 UNIT.
*1/4 UNIT

CONF		ARR

ENGL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

	BARKER, EVANS, FLANAGAN, GE TMAN, HAIG, HERRICK, HOLADAY, HOOK, KELLEY, MCBURNEY, MILLIGAN, ORNSTEIN, PAUL, ROBERTS, ROBINS, ROGERS, SCOTT, SHATTUCK, SMALLEY, SMITH, STILLINGER, STILLWELL, AND WILSON.
CONF	ARR

ENTOMOLOGY

DEPARTMENT OFFICE 320 MORRILL HALL

MAJOR--TWENTY HOURS IN ENTOMOLOGY, EXCLUDING ENTOM. 101, 103, AND 131. ZOOL. 318 AND 321 MAY BE APPLIED FOR MAJOR CREDIT. AT LEAST FIVE HOURS MUST BE TAKEN FROM THE ADVANCED GROUP.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--AGRONOMY, BOTANY, CHEMISTRY, HORTICULTURE, MICROBIOLOGY, PHYSIOLOGY, AND ZOOLOGY.

AS A GENERAL POLICY, STUDENTS WHO CONTEMPLATE EVENTUAL CAREERS IN ENTOMOLOGY ARE URGED TO USE THE UNDERGRADUATE YEARS TO GAIN THOROUGH GROUNDING IN THE FUNDAMENTALS OF PHYSICAL AND BIOLOGICAL SCIENCE, IN MATHEMATICS AND THE OTHER LIBERAL ARTS, AND IN THE TECHNIQUES OF COMMUNICATION. THE DEPARTMENT IS GLAD TO ADVISE STUDENTS IN REGARD TO THE MOST EFFECTIVE SCHEDULE OF STUDY TO SUIT THEIR PARTICULAR NEEDS.

ENTOM. 101 AND 103 ARE OPEN TO FRESHMEN, AND 131 TO SOPHOMORES, WITHOUT PREREQUISITES. PREREQUISITES FOR OTHER COURSES ARE INDICATED BELOW.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENTOM 306 SPECIAL PROBLEMS.
PREREQUISITE--ANY OF THE FOLLOWING--ENTOM. 131, 301, 302, 317, 319, 322, OR ZOOL. 101 OR 321, SENIOR STANDING.
2 TO 5 HOURS, OR 1/4 OR 1 UNIT
CONF ARR STAFF

ENTOM 312 ENTOMOLOGY FOR TEACHERS.
PREREQUISITE--ONE YEAR OF BIOLOGY, BOTANY, ZOOLOGY OR EQUIVALENT.
FIELD TRIPS.
3 HOURS, OR 1/2 UNIT
LAB-DISC A 10-12 MTUW F 310 H H WALDBAUER

COURSES FOR GRADUATES

ENTOM 499 THESIS--RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--MORPHOLOGY AND EMBRYOLOGY OF INSECTS	CHADWICK, LARSEN, STERNBURG
B--APPLIED ENTOMOLOGY	DECKER, HORSFALL, KEARNS
C--SYSTEMATIC ENTOMOLOGY	DOWNES, ROSS, SELANDER
D--BIOLOGY AND ECOLOGY OF INSECTS	HORSFALL
E--INSECT PHYSIOLOGY & TOXICOLOGY	CHADWICK, FRAENKEL, KEARNS, LARSEN, STERNBURG, WALDBAUER

*MAY BE TAKEN SATURDAY MORNING
LAB *ARR

FINANCE

DEPARTMENT OFFICE 311 D K H

REQUIREMENTS FOR L.A.S. STUDENTS

MAJOR--TWENTY HOURS IN FINANCE. A FINANCE MAJOR WHO CHOOSES ECONOMICS AS A MINOR MUST INCLUDE ALSO TWELVE HOURS IN A SECOND MINOR.

ECON. 108 OR ECON. 102 AND 103, ARE FUNDAMENTAL COURSES IN ECONOMICS AND ARE PREREQUISITES FOR COURSES IN FINANCE. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN FINANCE SHOULD TAKE ECON. 108, OR ECON. 102 AND 103, IN THEIR SOPHOMORE YEAR. LIBERAL ARTS MAJORS IN FINANCE ARE ADVISED STRONGLY TO ELECT ACCY. 201 AND A COURSE IN STATISTICS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SCCIOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES IS ACCEPTED AS A MINOR.

COURSES FOR ADVANCED UNDERGRADUATES

FIN 250 MONEY, CREDIT, AND BANKING.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	C	10	MTUWTHFS	123	D K H	PATTERSON

FIN 254 BUSINESS FINANCE.
PREREQUISITE--ECON. 102 AND 103, OR 108, ACCY. 105 OR 201.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	123	D K H	PATTERSON
LECT-DISC	D	11	MTUWTHFS	123	D K H	MAYER

FIN 259 INVESTMENT.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	11	MTUWTHFS	322	D K H	SWANSON

FIN 260 ECONOMICS OF INSURANCE.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

LECT-DISC	D	9	MTUWTHFS	123	D K H	MEHR

FIN 290 HONORS COURSE.
2 TO 4 HOURS

CONF	ARR		MEHR

FIN 295 SENIOR SEMINAR IN FINANCE, II.
PREREQUISITE--SENIOR STANDING, CONSENT OF DEPARTMENTAL ADVISOR.
*TEN SEMESTER HOURS IN THIS DEPARTMENT OR SIXTEEN SEMESTER HOURS DIVIDED BETWEEN THIS AND ANY OTHER DEPARTMENT MAY BE ACCUMULATED
*3 TO 5 HOURS

CONF	ARR		MEHR

COURSES FOR GRADUATES

FIN 456 INVESTMENT.
1 UNIT

LECT-DISC	A	8-10	M TH	317	D K H	MAYER

FIN 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT
CONF ARR MEHR

FIN 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
LECT-DISC QTH 4-6 TH 420 D K H MEHR

FOOD SCIENCE
INCLUDING DAIRY TECHNOLOGY

DEPARTMENT OFFICE 213 M H

COURSES FOR GRADUATES

F S 481 ADVANCED STUDIES IN FOOD SCIENCE.
1/2 TO 2 UNITS
CONF ARR STAFF

F S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

DAIRY TECHNOLOGY

OFFICE 104 D M B

COURSES FOR GRADUATES

D T 491 ASSIGNED PROBLEMS IN DAIRY TECHNOLOGY.
PREREQUISITE--GRADUATE STANDING IN DAIRY TECHNOLOGY.
1/2 TO 2 UNITS
CONF ARR STAFF

D T 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

FORESTRY

DEPARTMENT OFFICE 219 M H

COURSES FOR ADVANCED UNDERGRADUATES

THE FORESTRY COURSES FOR ADVANCED UNDERGRADUATES ARE DESIGNED PRIMARILY FOR STUDENTS WHO ARE CANDIDATES FOR THE PROFESSIONAL DEGREE OF BACHELOR OF SCIENCE IN FORESTRY IN EITHER THE FOREST PRODUCTION OR WOOD TECHNOLOGY AND UTILIZATION CURRICULUM. OTHER STUDENTS ARE ADMITTED TO MOST OF THESE COURSES, HOWEVER, IF THEY HAVE THE PREREQUISITES OR THE CONSENT OF THE INSTRUCTOR.

FOR 211 INTRODUCTION TO SILVICS AND SILVICULTURE--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
CONF ARR BOGGESS, LORENZ, SPAETH

FOR 221 FOREST MENSURATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
CONF ARR

FOR 231 WOOD UTILIZATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
2 HOURS
CONF ARR WALTERS

FOR 499 THESIS RESEARCH.
1 TO 3 UNITS
CONF ARR STAFF

FRENCH

DEPARTMENT OFFICE 244 L H

MAJOR--TWENTY HOURS IN FRENCH, EXCLUDING FRENCH 101, 102, 103, 104, 113, AND INCLUDING FR. 201, 202, 211, 212 AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. STUDENTS ARE ALSO STRONGLY ADVISED TO TAKE A YEARS WORK--TWO COURSES IN EUROPEAN HISTORY AND A YEARS WORK--TWO COURSES--IN ENGLISH LITERATURE. COURSES PARTICULARLY SUITABLE FOR THIS PURPOSE ARE--HIST. 111-112, 211-212, 309-310, 311-312, 313-314, 323-324. ENGL. 101, 102, 103, 105, 106, 121, 122, 123, 131, 231, 232, 245, 246, 251, 252, 253, 257, 258, 263, 264, 281, 282, 283, 284, 363.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT IF TWO ARE CHOSEN--EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR UNDERGRADUATES

FR 101 ELEMENTARY COURSE, I.
FOR STUDENTS WHO HAVE NO CREDIT IN FRENCH.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR FR. 101 WITHOUT FR. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,
LECT-DISC C1 10-12 MTU THF 374 L H
LECT-DISC C2 10-12 MTU THF 390 L H

FR 102 ELEMENTARY COURSE, II.
PREREQUISITE--FR. 101 OR ONE YEAR OF HIGH SCHOOL FRENCH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,
LECT-DISC 8-10 MTU THF 302 L H

FR 103 MODERN FRENCH, I.
PREREQUISITE--FR. 102 OR TWO YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
LECT-DISC A1 8-10 MTU THF 374 L H
LECT-DISC A2 8-10 MTU THF 390 L H

FR 104 MODERN FRENCH, II.
PREREQUISITE--FR. 103 OR THREE YEARS OF HIGH SCHOOL FRENCH.
4 HOURS

LECT-DISC		10-12	MTU THF	302	L H	

COURSES FOR ADVANCED UNDERGRADUATES

FR 201 INTRODUCTION TO FRENCH LITERATURE, I.
PREREQUISITE--FR. 104 OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS

LECT-DISC		11	MTUWTHFS	232	L H	BUCKNALL

FR 211 ORAL FRENCH, I
PREREQUISITE--FR. 104, OR 103 AND 113, OR FOUR YEARS OF HIGH SCHOOL FRENCH. PRACTICE IN LANGUAGE LABORATORY IS REQUIRED.
3 HOURS

LECT-DISC	B1	9	MTUWTHFS	46	G H	
LECT-DISC	B2	9	MTUWTHFS	242	L H	

FR 212 ORAL FRENCH, II
PREREQUISITE--FR. 211. WITH PERMISSION, FR. 212 MAY BE TAKEN WITH 211 IN THE SUMMER SESSION. PRACTICE IN LANGUAGE LABORATORY IS REQUIRED.
3 HOURS

LECT-DISC		10	MTUWTHFS	46	G H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED UNDERGRADUATE COURSES IN FRENCH EXCEPT FR. 382 HAVE THE FOLLOWING PREREQUISITE--FRENCH 201 AND 202 OR EQUIVALENT.

FR 309 SURVEY OF FRENCH LITERATURE, I.
3 HOURS, OR 3/4 OR 1 UNIT

LECT-DISC		11	MTUWTHFS	3	G H	HARRIS

FR 317 LE THEATRE FRANCAIS DEPUIS 1800.
3 HOURS - 3/4 UNIT

LECT-DISC		1	MTU THF	242	L H	JAHIEL

FR 336 CIVILISATION FRANCAISE, II.
3 HOURS - 3/4 UNIT

LECT-DISC		9	MTUWTHF	232	L H	MAINOUS
		10	W	216	L H	

FR 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS GER., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC		10	MTU THF	216	L H	NACHTMANN

COURSES FOR GRADUATES

FR 400 BEGINNING FRENCH FOR GRADUATE STUDENTS.
4 HOURS, NO GRADUATE CREDIT

LECT-DISC	A1	8-10	MTU THF	330	ARMORY	
LECT-DISC	A2	8-10	MTU THF	331	ARMORY	
LECT-DISC	A3	8-10	MTU THF	262	L H	
LECT-DISC	C	10-12	MTU THF	331	ARMORY	
LECT-DISC	G	3-5	MTU THF	330	ARMORY	
LECT-DISC	T	7-9PM	MTU THF	3	G H	

FR 401 READING FRENCH FOR GRADUATE STUDENTS.
PREREQUISITE--FR. 400, OR FR. 101 AND 102, OR EQUIVALENT.
4 HOURS, NO GRADUATE CREDIT

LECT-DISC	A	8-10	MTU THF	3	G H	
LECT-DISC	G	3-5	MTU THF	43	G H	
LECT-DISC	T	7-9PM	MTU THF	111	G H	

FR 407 ADVANCED FRENCH DICTION.
1/2 UNIT
LECT-DISC 2 MTU THF 3 G H HARRIS

FR 409 THE PHONETICS OF FRENCH.
1/2 UNIT
LECT-DISC 4 MTU THF 3 G H KNUDSON

FR 453 FRENCH REALISM AND NATURALISM, I.
1 UNIT
LECT-DISC 3 MTU THF 3 G H JAHIEL

FR 459 SEMINAR IN MODERN FRENCH LITERATURE--1870-1935.
*STUDENTS MAY RECEIVE CREDIT MORE THAN ONCE.
*1 UNIT
LECT-DISC 1 MTU THF 46 G H KOLB

FR 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN FRENCH.
1/4 TO 1 UNIT
CONF ARR STAFF

FR 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GENERAL ENGINEERING

DEPARTMENT OFFICE 117 T B

SPECIAL SUMMER COURSE FOR HIGH SCHOOL STUDENTS

G E 010 SUMMER SCIENCE TRAINING PROGRAM FOR HIGH SCHOOL STUDENTS.
THIS PROGRAM IS DESIGNED TO FAMILIARIZE SELECTED HIGH SCHOOL
STUDENTS WITH PAST ACHIEVEMENTS, CURRENT RESEARCH AND PRACTICE,
AND FUTURE NEEDS IN SCIENCE AND ENGINEERING. ENROLLMENT IS
LIMITED TO SUCCESSFUL APPLICANTS TO A 6 WEEK SUMMER SCIENCE
TRAINING PROGRAM SPONSORED BY THE NATIONAL SCIENCE
FOUNDATION TO BE HELD FROM JUNE 22 TO JULY 31. NO CREDIT

LAB-DISC	A	8-12	MTUWTHF	216	T B	DOBROVOLNY,
LAB-DISC	A	1-4	MTUWTHF	216	T B	MARTIN, AND
LAB-DISC	A	8-12	MTUWTHF	201	T B	REYES-GUERRA
LAB-DISC	A	1-4	MTUWTHF	201	T B	

COURSES FOR UNDERGRADUATES

G E 103 ENGINEERING GRAPHICS, I.
3 HOURS
LAB-DISC A3 7-9 MTUWTHFS 305 T B PHILLIPS

G E 104 ENGINEERING GRAPHICS, II.
PREREQUISITE--G.E. 103 OR EQUIVALENT.
3 HOURS
LAB-DISC A4 8-10 MTUWTHFS 306 T B STREETER

COURSES FOR ADVANCED UNDERGRADUATES

G E 220 HISTORY OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
LAB-DISC F 1-230 MTU THF 206 T B JEWETT

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

G E 393 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT
*SECTIONS A AND B ARE RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. THESE SECTIONS WILL BE A STUDY OF TECHNICAL EDUCATION PROBLEMS. SECTION A WILL BE FOR 1/4 UNIT OF CREDIT AND SECTION B FOR 1 UNIT OF CREDIT.

LAB-DISC	*A	1-3	M W F	114	T B		DOBROVOLNY AND OTHERS
LAB-DISC	*B	9	M W F	105	T B		PLACEK
	B	2	TU TH	105	T B		PLACEK

GEOGRAPHY

DEPARTMENT OFFICE 220 D H

MAJOR--TWENTY HOURS IN GEOGRAPHY IN ADDITION TO GEOGRAPHY 101. AT LEAST FIFTEEN OF THE TWENTY HOURS MUST BE IN COURSES CARRYING ADVANCED CREDIT. INDIVIDUAL PROGRAMS ARE ARRANGED FOR MAJOR STUDENTS WITH THE FOLLOWING SPECIAL INTERESTS--LIBERAL EDUCATION, BUSINESS, CARTOGRAPHY, GOVERNMENT, TEACHING, OR GRADUATE STUDY. THESE PROGRAMS INCLUDE DEPARTMENTAL COURSES, MINOR FIELDS, AND RECOMMENDED ELECTIVES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS IN DEPARTMENTS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED IN CONSULTATION WITH THE DEPARTMENTAL ADVISER AND WITH THE APPROVAL OF THE DEAN OF THE COLLEGE. AT LEAST EIGHT HOURS OF THE TWENTY MINOR HOURS MUST BE TAKEN IN EACH IF THE STUDENT ELECTS TO MINOR IN TWO DIFFERENT DEPARTMENTS.

DEPARTMENTAL DISTINCTION--STUDENTS ELIGIBLE FOR GRADUATION WITH HONORS IN LIBERAL ARTS AND SCIENCES SHOULD CONSULT WITH THE DEPARTMENTAL ADVISER CONCERNING GRADUATION WITH DISTINCTION IN GEOGRAPHY.

COURSES FOR UNDERGRADUATES

GEOG 101 ELEMENTS OF GEOGRAPHY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT	B	9	MTUWTH	323	D H		BOOTH
QUIZ		3-5	TUWTH	323	D H		

GEOG 111 INTRODUCTORY METEOROLOGY.
PREREQUISITE--GEOG. 101 OR CONSENT OF INSTRUCTOR.
3 HOURS

LECT-DISC		750-850	MTUWTHF	323	D H		PAGE

GEOG 114 CONSERVATION OF NATURAL RESOURCES.
PREREQUISITE--SOPHOMORE STANDING.
3 HOURS

LECT-DISC	D	11	MTUWTH	323	D H		BOOTH
	D	11-1	F	323	D H		

COURSES FOR ADVANCED UNDERGRADUATES

GEOG 272 INTRODUCTORY FIELD GEOGRAPHY.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
5 TO 8 HOURS DEPENDING ON DURATION OF CAMP.
FIELD CAMP METROPOLIS, ILLINOIS ALEXANDER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOG 332 GEOGRAPHY OF SOUTH AMERICA.
PREREQUISITE--EIGHT HOURS OF GEOGRAPHY, ENROLLMENT IN LATIN-AMERICAN STUDIES PROGRAM, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	C	10	MTUWTHF	323	D H	PAGE
	C	1	M	323	D H	

GEOG 371 INTRODUCTION TO RESEARCH, I.
LIMITED TO STUDENTS WHOSE MAJOR IS GEOGRAPHY AND TO SENIORS WHOSE MAJOR IS IN OTHER DEPARTMENTS BUT WHO HAVE TWELVE HOURS OF GEOGRAPHY.
2 HOURS, OR 1/2 UNIT
LECT-DISC ARR STAFF

COURSES FOR GRADUATES

GEOG 478 ADVANCED FIELD GEOGRAPHY.
PREREQUISITE--GRADUATE STANDING IN GEOGRAPHY.
1 1/4 TO 2 UNITS

FIELD CAMP METROPOLIS, ILLINOIS ALEXANDER

GEOG 495 ADVANCED STUDIES IN GEOGRAPHY.
1/2 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--

ECONOMIC GEOGRAPHY	ROEPKE
PROBLEMS OF GEOGRAPHY	STAFF
ASIA	BOOTH
TRANSPORTATION	BOOTH

GEOG 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GEOLOGY

DEPARTMENT OFFICE 234 N H

MAJOR--TWENTY HOURS IN GEOLOGY, EXCLUDING GEOL. 101, PHYSICAL GEOLOGY, 105, AGRICULTURAL GEOLOGY, AND 150, GEOLOGY FOR ENGINEERS. THE FOLLOWING COURSES, IN ADDITION TO GEOL. 101, PHYSICAL GEOLOGY, ARE FUNDAMENTAL FOR A MAJOR IN GEOLOGY 102, HISTORICAL GEOLOGY, 131 AND 132, MINERALOGY, 301, GEOMORPHOLOGY, 311, STRUCTURAL GEOLOGY 320, PALEONTOLOGY, 321, STRATIGRAPHY, 317, FIELD GEOLOGY IN THE ROCKY MOUNTAINS, G E 205, APPLIED DESCRIPTIVE GEOMETRY IN GEOLOGICAL PROBLEMS, CHEM. 101 OR 102, GENERAL CHEMISTRY, PHYSICS 101, GENERAL PHYSICS, MATH. 112, COLLEGE ALGEBRA, MATH. 114, TRIGONOMETRY, AND MATH. 123 OR 122, ANALYTIC GEOMETRY.

STUDENTS ARE ADVISED TO TAKE MATH. 132 AND 142, OR MATH. 133 AND 143 CALCULUS, AND PHYSICS 102, GENERAL PHYSICS.

STUDENTS WHOSE PRIMARY INTEREST IS MINERALOGY, PETROLOGY, AND MINERAL DEPOSITS SHOULD ALSO TAKE CHEM. 105, INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS, AND CHEM. 245 AND 246, PHYSICAL CHEMISTRY FOR ENGINEERS, OR THE EQUIVALENT. IT IS ALSO ADVISABLE FOR SUCH STUDENTS TO TAKE GEOL. 335, OPTICAL MINERALOGY, AND GEOL. 336, PETROGRAPHY, DURING THE SENIOR YEAR.

MINORS--TWENTY HOURS CHOSEN FROM ONE OR TWO OF THE FOLLOWING SUBJECTS--ASTRONOMY, BOTANY, CHEMISTRY, CIVIL ENGINEERING, ECONOMICS GEOGRAPHY, MATHEMATICS, MINING ENGINEERING, PHYSICS, AND ZOOLOGY, AFTER CONSULTATION WITH THE DEPARTMENT OF GEOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

DEPARTMENTAL DISTINCTION--ONLY THOSE STUDENTS WHO HAVE CREDIT IN GEOL. 290 AND WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. EACH STUDENT WHO DESIRES TO REGISTER MUST OBTAIN A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK AND PRESENT IT TO THE HEAD OF THE DEPARTMENT AT THE TIME OF REGISTRATION.

NOTE--CERTAIN GEOLOGY COURSES ARE OFFERED ONLY IN ALTERNATE YEARS--324, VERTEBRATE PALEONTOLOGY, 401, ADVANCED DYNAMIC GEOLOGY, 402, ADVANCED HISTORICAL GEOLOGY, 428, PALYNOLOGY.

AT LEAST ONE YEAR OF GRADUATE WORK IS NECESSARY AS FURTHER TRAINING FOR ALL PROFESSIONAL WORK IN GEOLOGY.

GEOL 290 INTRODUCTION TO RESEARCH
PREREQUISITE--CONSENT OF INSTRUCTOR.
CREDIT TO BE ARRANGED.
CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOL 317 FIELD GEOLOGY IN THE ROCKY MOUNTAINS.
PREREQUISITE--GEOL. 102 AND CONSENT OF INSTRUCTOR.
FIELD TRIP, APPROXIMATE COST $250 TO $305.
8 HOURS, OR 2 UNITS
LAB-DISC ARR CROPP AND OTHERS

COURSES FOR GRADUATES

GEOL 493 ADVANCED STUDIES IN GEOLOGY.
1/2 TO 2 UNITS

CLAY MINERALOGY	GRIM
ENGINEERING GEOLOGY	DEERE,
GEOMORPHOLOGY AND GLACIAL GEOLOGY	SHAFFER, WHITE
GEOTECTONICS	CAROZZI
GROUND-WATER GEOLOGY	FARVOLDEN
MICROPALEONTOLOGY	SCOTT
MINERAL DEPOSITS	HAGNER
MINERALOGY AND CRYSTALLOGRAPHY	HENDERSON
PALEOBOTANY--SEE BOT. 493	STEWART
PALEONTOLOGY	HAY, SCOTT
PENNSYLVANIAN STRATIGRAPHY	WANLESS
PETROGRAPHY AND PETROLOGY	CHAPMAN
SEDIMENTARY PETROLOGY	CAROZZI, HOUGH, WANLESS
STRATIGRAPHY	LANGENHEIM, SCOTT

CONF ARR STAFF

GEOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

GERMAN

DEPARTMENT OFFICE 371 L H

MAJOR--TWENTY HOURS IN GERMAN, EXCLUDING GERMAN 101, 102, 103, 104, AND 113, AND INCLUDING AT LEAST SIX HOURS IN COURSES IN THE 300 GROUP--NORMALLY 301 AND 302--OR EQUIVALENT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO SUBJECTS CHOSEN FROM THE FOLLOWING LIST, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT--EDUCATION ENGLISH--EXCLUDING RHET. 101, 102, AND 200--FRENCH, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, LINGUISTICS--EXCLUDING LING. 301--MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, RUSS. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT LANGUAGE.

COURSES FOR UNDERGRADUATES

GER 101 ELEMENTARY COURSE, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR GER. 101 WITHOUT GER. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, TIME TO BE ARRANGED.
LECT-DISC A 8-10 MTUWTH 332 ARMORY

GER 102 ELEMENTARY COURSE, II.
PREREQUISITE--GER. 101 OR ONE YEAR OF HIGH SCHOOL GERMAN.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY--TIME TO BE ARRANGED.
LECT-DISC C 10-12 MTUWTH 332 ARMORY

GER 103 INTERMEDIATE COURSE, I.
PREREQUISITE--GER. 102, TWO YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
STUDENTS MUST REGISTER FOR 1/2 HOUR OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
LECT-DISC A 8-10 MTUWTH 432 ARMORY EBERSPACH

GER 104 INTERMEDIATE COURSE, II.
PREREQUISITE--GER. 103, OR THREE YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
LECT-DISC C 10-12 MTUWTH 432 ARMORY EBERSPACH

COURSES FOR ADVANCED UNDERGRADUATES

GER 210 MASTERPIECES OF GERMAN LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GERMAN OR EQUIVALENT.
3 HOURS
LECT-DISC A 8-10 M W F 261 L H PHILIPPSON

GER 211 CONVERSATION AND WRITING, I.
PREREQUISITE--GER. 103 AND 113, OR GER. 104, OR EQUIVALENT.
3 HOURS
LECT-DISC C 10-12 M W F 261 L H FREY

GER 291 SENIOR THESIS AND HONORS COURSE.
PREREQUISITE--SENIOR STANDING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GER 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC	10	MTU THF	216	L	H	NACHTMANN

COURSES FOR GRADUATES

GER 400 BEGINNING GERMAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.

LECT-DISC	A1	8-10	MTUWTH	332	L	H	
LECT-DISC	A2	8-10	MTUWTH	370	L	H	
LECT-DISC	C1	10-12	MTUWTH	332	L	H	
LECT-DISC	C2	10-12	MTUWTH	370	L	H	FOULKES
LECT-DISC	L	7-9PM	MTUWTH	332	L	H	

GER 401 READINGS IN GERMAN FOR GRADUATE STUDENTS.
PREREQUISITE--GER. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
*SECTIONS C, E2, AND L2 DO READINGS PARTICULARLY IN THE HUMANITIES AND THE SOCIAL SCIENCES, SECTIONS A, E1, AND L1 IN THE NATURAL SCIENCES.

LECT-DISC	A	8-10	M W F	388	L	H		GIORDANO
LECT-DISC	C	10-12	M W F	388	L	H		PHILIPPSON
LECT-DISC	E1	1-3	M WTH	388	L	H		SCHWALBE
LECT-DISC	E2	1-3	M WTH	332	L	H		FOULKES
LECT-DISC	L1	7-9PM	M WTH	370	L	H		
LECT-DISC	L2	7-9PM	M WTH	388	L	H		SCHWALBE

GER 493 RESEARCH IN SPECIAL TOPICS.
1 TO 4 UNITS

LECT-DISC		ARR				FREY

GER 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS

CONF		ARR				STAFF

GREEK

DEPARTMENT OFFICE 360 L H

MAJOR--TWENTY HOURS. IN ADDITION CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, LATIN BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

CREDIT FOR NEW TESTAMENT GREEK TRANSFERRED FROM OTHER INSTITUTIONS IS NOT COUNTED TOWARD A MAJOR OR MINOR UNTIL AFTER THE SATISFACTORY COMPLETION OF GREEK 201-202 AND THEN ONLY TO A POSSIBLE MAXIMUM OF EIGHT HOURS AS THE EQUIVALENT OF GREEK 101-102 AND THREE HOURS AS THE EQUIVALENT OF ONE SEMESTER OF GREEK 391.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GRK 391 READINGS IN GREEK LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GREEK, CONSENT OF INSTRUCTOR.
*MAY BE REPEATED FOR MAXIMUM OF 12 HOURS CREDIT.
*3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC A 9 MTUWTHFS 362 L H DONOVAN

COURSES FOR GRADUATES

GRK 499 THESIS RESEARCH.
SAME AS LAT. 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

HEALTH EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

H ED 281 FIRST AID.
2 HOURS
LECT-DISC D 11 MTUWTH 211 H G BOYS

H ED 282 ORGANIZATION OF SCHOOL HEALTH PROGRAMS.
3 HOURS
LECT-DISC A 7-9 M 207 H G
A 8 TUWTHF 207 H G HOYMAN

COURSES FOR GRADUATES

H ED 401 PROBLEMS IN SCHOOL HEALTH EDUCATION.
1 UNIT
LECT-DISC 9 MTUWTH 207 H G HOYMAN

H ED 490 SEMINAR.
NO CREDIT
LECT-DISC 2 TU TH 211 H G HUFFMAN

H ED 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

HISTORY

DEPARTMENT OFFICE 325 L H

MAJOR--TWENTY HOURS IN HISTORY, INCLUDING AT LEAST TEN HOURS IN COURSES HAVING JUNIOR STANDING AS A PREREQUISITE, AND NOT INCLUDING MORE THAN FOUR HOURS IN COURSES OPEN TO FRESHMEN. THE COURSES OFFERED MUST INCLUDE AT LEAST SIX HOURS IN AMERICAN HISTORY, SIX HOURS IN MODERN EUROPEAN HISTORY SINCE 1500, AND SIX HOURS IN OTHER FIELDS OF HISTORY.

MINORS--TWENTY HOURS, NOT INCLUDING MORE THAN FOUR HOURS OPEN TO FRESHMEN, IN ONE OR TWO OF THE FOLLOWING--ANCIENT OR MODERN LANGUAGE EXCLUDING ELEMENTARY COURSES 101 AND 102, ANTHROPOLOGY, ECONOMICS, ENGLISH AND AMERICAN LITERATURE, GEOGRAPHY, LAW, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN AMERICAN STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR, EXCLUDING THE COURSES IN HISTORY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 121 AND 122, HISTORY OF CIVILIZATION, ARE ACCEPTED AS SATISFYING THE PREREQUISITE OF A YEAR OF COLLEGE HISTORY IN ALL CASES IN WHICH IT IS REQUIRED.

HIST 112 HISTORY OF WESTERN CIVILIZATION, 1815 TO THE PRESENT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		9	MTUWTH	329	ARMORY	SCHROEDER
DISC	A	11	MTUWTH	329	ARMORY	

HIST 151 HISTORY OF THE UNITED STATES TO 1865.
PREREQUISITE--SOPHOMORE STANDING.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 151 AND 261.
*4 HOURS

LECT		8	MTUWTH	428	ARMORY	MCCOLLEY
DISC	A	10	MTUWTH	329	ARMORY	
DISC	B	11	MTUWTH	430	ARMORY	

HIST 152 HISTORY OF THE UNITED STATES FROM 1865 TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 152 AND 262.
*4 HOURS

LECT		8	MTUWTH	112	G H	WALLER
LECT		8	MTUWTH	112	G H	WALLER
DISC	A	9	MTUWTH	329	ARMORY	
DISC	B	9	MTUWTH	430	ARMORY	
DISC	C	10	MTUWTH	330	ARMORY	
DISC	D	11	MTUWTH	330	ARMORY	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--JUNIOR STANDING AND ONE YEAR OF COLLEGE HISTORY IS REQUIRED EXCEPT WHERE NOTED.

NOTE--ONE YEAR OF COLLEGE HISTORY IS REQUIRED EXCEPT WHERE NOTED.

HIST 307 CLASSICAL ISLAM--THE NEAR EAST FROM MOHAMMED TO THE CRUSADES.
3 HOURS, OR 1/2 OR 1 UNIT

LECT		10	MTUWTHFS	430	ARMORY	DAWN

HIST 319 MODERN EUROPEAN INTERNATIONAL RELATIONS, 1890 TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT		11	MTUWTHFS	428	ARMORY	SCHROEDER

HIST 341 MODERN BRITAIN, THE VICTORIAN ERA, 1815-1900.
3 HOURS, OR 1/2 OR 1 UNIT

LECT		9	MTUWTHFS	428	ARMORY	ARNSTEIN

HIST 352 COLONIAL BEGINNINGS OF AMERICAN LIFE AND INSTITUTIONS.
3 HOURS, OR 1/2 OR 1 UNIT

LECT		10	MTUWTHFS	333	ARMORY	MCCOLLEY

HIST 362 HISTORY OF THE UNITED STATES SINCE 1917.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY, POLITICAL SCIENCE, OR ECONOMICS.
3 HOURS, OR 1/2 OR 1 UNIT

LECT		11	MTUWTHFS	333	ARMORY	WALLER

HIST 373 DIPLOMATIC HISTORY OF THE UNITED STATES TO THE END OF THE
373 NINETEENTH CENTURY.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE.
3 HOURS, OR 1/2 OR 1 UNIT

LECT	10	MTUWTHFS	428	ARMORY	GRAEBNER

HIST 383 HISTORY OF THE ROMAN REPUBLIC TO 44 B C.
3 HOURS, OR 1/2 OR 1 UNIT

LECT	9	MTUWTHFS	333	ARMORY	KAGAN

COURSES FOR GRADUATES

HIST 432 SEMINAR IN ENGLISH HISTORY.
1 UNIT

DISC	3-5	M W	303	ARMORY	ARNSTEIN

HIST 456 SEMINAR IN AMERICAN DIPLOMATIC HISTORY.
1 UNIT

DISC	1-3	TU TH	303	ARMORY	GRAEBNER

HIST 471 SEMINAR IN THE CONSTITUTIONAL HISTORY OF THE UNITED STATES.
1 UNIT

DISC	730-930PM	M W	303	ARMORY	HYMAN

HIST 482 SEMINAR IN ANCIENT HISTORY.
1 UNIT

DISC	3-5	TU TH	303	ARMORY	KAGAN

HIST 495 HISTORICAL METHOD.
1 UNIT

LECT	8	MTUWTH	430	ARMORY	DAWN

HIST 497 READING COURSE.
PREREQUISITE--MASTERS DEGREE OR EQUIVALENT, CONSENT OF
INSTRUCTOR.
1 UNIT

CONF	ARR				STAFF

HIST 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR				STAFF

HOME ECONOMICS

DEPARTMENT OFFICE 260 BEV HALL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

H EC 323 RECENT ADVANCES IN FOODS AND NUTRITION.
PREREQUISITE--CHEM. 132 OR 133, H. EC. 220 AND 231, PHYSL. 103.
2 HOURS, OR 1/2 UNIT
SECOND FOUR WEEKS--JULY 13-AUGUST 6.

LECT-DISC	8-10	TUWTHF	449	BEV HALL	BROWN, LAMKIN, VAN DUYNE

H EC 326 DEMONSTRATION PROBLEMS AND TECHNIQUES.
PREREQUISITE--ONE OF THE FOLLOWING--H. EC. 231, 262, 270, 301,
375, 379, 380, 386, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
SECOND FOUR WEEKS--JULY 13-AUGUST 6.

LECT	1-3	M	328	BEV HALL	LAMKIN
LAB	1-4	TUWTHF	328	BEV HALL	

H EC 361 DEVELOPMENT AND FUNCTION OF FAMILY HOUSING.
SAME AS AG. E. 361.
PREREQUISITE--H. EC. 160 AND 171 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 16-JULY 11.

LECT-DISC	8-11	M W F	218	AGR ENG	HANSEN
LAB	8-11	TU TH	202	AGR ENG	

H EC 378 PROBLEMS IN HOME MANAGEMENT.
PREREQUISITE--H. EC. 270 OR 262, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
FIRST FOUR WEEKS--JUNE 16-JULY 11.

DISC	1-4	TUWTHF	234	BEV HALL	KAUFFMAN

H EC 379 PROBLEMS IN FAMILY AND CONSUMPTION ECONOMICS.
PREREQUISITE--ECON. 102 OR 108 AND A COURSE IN APPLIED STATISTICS, H. EC. 370 OR CONSENT OF INSTRUCTOR, SENIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

CONF	ARR				DUNSING

H EC 380 ADVANCED TEXTILES.
PREREQUISITE--CHEM. 132, H. EC. 183.
4 HOURS, OR 1 UNIT

LECT	8	TUWTHF	208	BEV HALL	CROUTHAMEL
LAB	9-11	TUWTHF	201	BEV HALL	CROUTHAMEL

H EC 388 PROBLEMS IN TEXTILES AND CLOTHING.
PREREQUISITE--H. EC. 286 OR 380, OR MKTG. 211, MINIMUM GRADE POINT AVERAGE OF 3.5, SENIOR STANDING IN HOME ECONOMICS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

CONF	ARR				GALBRAITH

COURSES FOR GRADUATES

H EC 410 PROBLEMS IN FAMILY LIVING.
PREREQUISITE--H. EC. 210.
1 UNIT

LECT	11	TUWTHF	208	C D	VISITING PROFESSOR

H EC 493 ADVANCED STUDIES IN HOME ECONOMICS.
1/2 OR 1 UNIT
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--THE CHILD AND THE FAMILY
B--FAMILY ECONOMICS
C--FOODS
D--NUTRITION
E--TEXTILES AND CLOTHING

CONF	ARR				STAFF

HORTICULTURE

DEPARTMENT OFFICE 124 M H

COURSES FOR ADVANCED UNDERGRADUATES

HORT 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5. NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR A THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--POMOLOGY	LOTT, SIMONS, TITUS, ZYCH
B--VEGETABLE CROPS	ARNOLD, MCCOLLUM, THOMPSON VANDEMARK
C--FLORICULTURE	BEEVERS, BUTLER, CULBERT, FOSLER, GARTNER, HODGES KEMMERER, NELSON
D--FRUIT BREEDING	BIRKELAND, DAYTON
E--APICULTURE	JAYCOX

CONF ARR STAFF

COURSES FOR GRADUATES

HORT 492 SPECIAL TOPICS IN HORTICULTURE.
PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
1/2 TO 2 UNITS
CONF ARR STAFF

HORT 499 THESIS RESEARCH.
REQUIRED FOR MAJOR IN HORTICULTURE. PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--FLORICULTURE	CULBERT, GARTNER,
B--FRUIT BREEDING	BIRKELAND, DAYTON
C--POMOLOGY	LOTT, SIMONS, TITUS
D--VEGETABLE CROPS	ARNOLD, MCCOLLUM, RHODES, THOMPSON, VANDEMARK

CONF ARR STAFF

HYGIENE

DEPARTMENT OFFICE HEALTH CENTER

COURSES FOR ADVANCED UNDERGRADUATES

HYG 200 MENTAL HEALTH.
2 HOURS
LECT-DISC A 11 MTUWTH 393 BEV HALL LITTLE

HYG 206 SEX EDUCATION AND FAMILY LIFE.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
LECT-DISC A 10 MTUWTH 393 BEV HALL

ITALIAN

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN ITALIAN, EXCLUDING ITALIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. HISTORY 217, LINGUISTICS 300 AND ITALIAN 291 AND 292 ARE ACCEPTABLE. ITALIAN 291 AND 292 FOR MAJORS CAN BE ARRANGED FOR ADVANCED GROUP CREDIT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--
EDUCATION, ENGLISH, EXCLUDING RHET. 101 AND 102, FRENCH, GERMAN, GREEK, HISTORY, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR GRADUATES

ITAL 491 SPECIAL TOPICS IN ITALIAN.
1/2 OR 1 UNIT
CONF ARR STAFF

ITAL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
CONF ARR SHOEMAKER, KAHANE

JOURNALISM

DEPARTMENT OFFICE 115 G H

COURSES FOR ADVANCED UNDERGRADUATES

JOURN 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS
CONF ARR SCHACHT

COURSES FOR GRADUATES

JOURN 473 HISTORY AND THEORY OF FREEDOM OF THE PRESS.
SAME AS COMM. 473.
1 UNIT
LECT-DISC 9-11 TU TH 123 G H JENSEN

JOURN 490 SPECIAL TOPICS IN JOURNALISM.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 OR 1 UNIT
CONF ARR STAFF

JOURN 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN JOURNALISM.
1 TO 2 UNITS
CONF ARR JENSEN

LABOR AND INDUSTRIAL RELATIONS

DEPARTMENT OFFICE 249 L I R

COURSES FOR GRADUATES

L I R 490 INDIVIDUAL TOPICS.
1/2 TO 2 UNITS
CONF ARR STAFF

L I R 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR STAFF

LANDSCAPE ARCHITECTURE

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

L A 436 ADVANCED LANDSCAPE DESIGN.
PREREQUISITE--BACHELORS DEGREE IN LANDSCAPE ARCHITECTURE.
1 TO 2 UNITS
CONF ARR 205 M H HAZLETT

L A 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR 205 M H HAZLETT

LATIN

DEPARTMENT OFFICE 360 L H

MAJOR--TWENTY HOURS, EXCLUDING LATIN 101, 102, 103, AND INCLUDING SIX HOURS IN TRANSLATION COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES. IN ADDITION, CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE. SEE ALSO THE SPECIALIZED CURRICULUM PREPARATORY TO THE TEACHING OF LATIN.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, GREEK BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LAT 391 READINGS IN LATIN LITERATURE.
PREREQUISITE--THREE YEARS OF COLLEGE LATIN OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS.
*3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC A 11 MTUWTHFS 362 L H DONOVAN

LAT 421 HORACE.
1 UNIT
LECT-DISC 1-230 M W F 394 L H BATEMAN

LAT 499 THESIS RESEARCH.
SAME AS GRK. 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

LATIN-AMERICAN STUDIES PROGRAM

DEPARTMENT OFFICE 124 D H

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

STUDENTS MAY ELECT THE LATIN-AMERICAN STUDIES PROGRAM AS EITHER A MAJOR OR A MINOR. IN BOTH CASES STUDENTS FOLLOW THE SAME PROGRAM. STUDENTS WHO ELECT LATIN-AMERICAN STUDIES AS A MAJOR OR MINOR SHALL BE REQUIRED TO--

1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE GENERAL CURRICULUM.

2-COMPLETE SIX SEMESTERS OR EQUIVALENT OF COLLEGE SPANISH OR PORTUGUESE. IF A STUDENT WISHES TO TAKE BOTH SPANISH AND PORTUGUESE HE MAY TAKE TWO YEARS OF EACH TO SATISFY THIS REQUIREMENT. IN THE CASE OF WELL-QUALIFIED STUDENTS THE LANGUAGE REQUIREMENT MAY BE MODIFIED.

3-COMPLETE AT LEAST TWENTY SEMESTER HOURS FROM THE COURSES LISTED BELOW, INCLUDING SOC. S. 101 AND/OR 102 AND SOC. S. 301, CHOSEN FROM AMONG FOUR DEPARTMENTS. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE LATIN-AMERICAN STUDIES PROGRAM MAY NOT BE INCLUDED WITHIN THIS TWENTY HOURS.

ANTH. 271, 350, 352, 361, 380
ART 318

ECON. 328, 329
GEOG. 231, 332
HIST. 375, 376, 377

PHIL. 319
POL. S. 342,
PORT. 301, 303, 304, 305, 306
SOC. S. 101, 102, 301
SOC. 373
SPAN. 222, 307, 308, 332

MINORS--STUDENTS WHO MAJOR IN LATIN-AMERICAN STUDIES MAY ELECT MINORS AS FOLLOWS--TWENTY HOURS, EXCLUDING COURSES TAKEN IN FRESHMAN YEAR, IN ANY ONE OF THE FOLLOWING SUBJECTS, AGRICULTURAL ECONOMICS, ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, HISTORY OF ART, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH, SOCIAL WORK, AND SOCIOLOGY. MAJORS IN LATIN AMERICAN STUDIES MAY NOT OFFER A SPLIT MINOR.

SPLIT MINOR--STUDENTS MAY SPLIT A MINOR BETWEEN LATIN-AMERICAN STUDIES AND ANOTHER DEPARTMENT, BUT MUST MEET THE LANGUAGE REQUIREMENT AND TAKE AT LEAST TWELVE SEMESTER HOURS FROM LATIN-AMERICAN STUDIES, INCLUDING SOC. S. 301, AND COURSES FROM AT LEAST TWO DEPARTMENTS IN THE CURRICULUM EXCLUSIVE OF COURSES USED IN THE MAJOR DEPARTMENT.

GRADUATE MINOR IN LATIN-AMERICAN STUDIES

CANDIDATES FOR THE MASTERS DEGREE MUST ELECT A MINIMUM OF TWO UNITS FOR A MINOR IN THIS PROGRAM. DOCTORAL CANDIDATES WHO ELECT LATIN-AMERICAN STUDIES AS A SOLE MINOR MUST EARN A MINIMUM OF FOUR UNITS OF CREDIT IN APPROVED COURSES, FOR A SPLIT MINOR, AT LEAST THREE UNITS OF CREDIT MUST BE EARNED. THE COURSES FOR ALL GRADUATE MINORS IN LATIN-AMERICAN STUDIES MUST BE TAKEN IN AT LEAST TWO DEPARTMENTS OR SUBJECTS AND MUST BE APPROVED BY THE DIRECTOR OF LATIN-AMERICAN STUDIES. COURSES IN THE FOLLOWING LIST MAY BE INCLUDED IN THE GRADUATE MINOR.

AG. EC. 401
ANTH. 350, 352, 361, 380, 490
ART 318, 491
BOT. 300
ECON. 328, 329, 411, 490
GEOG. 332, 495
HIST. 375, 376, 377, 476
PHIL. 319, 483
POL. S. 342, 493
PORT. 301, 303, 304, 305, 306, 491
SOC. S. 301
SOC. 373, 490
SPAN. 222, 307, 308, 332 434, 435, 436

STUDENTS IN OTHER COLLEGES

STUDENTS IN TECHNICAL AND PROFESSIONAL COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF LATIN-AMERICAN AFFAIRS, CULTURE, AND LANGUAGES ARE INVITED TO CONSULT WITH MEMBERS OF THE TEACHING STAFF OF THE LATIN-AMERICAN STUDIES PROGRAM, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH A PROGRAM MAY OFTEN BE ADOPTED AS A SPECIAL MINOR UNDER EXISTING REGULATIONS IF THE STUDENT SO DESIRES. IT IS RECOGNIZED THAT THE NUMBER OF ELECTIVE HOURS AVAILABLE FOR SUCH SPECIAL AREA STUDIES VARIES AMONG MANY OF THE EIGHT AND TEN SEMESTER PROGRAMS IN THE UNIVERSITY, BUT MOST STUDENTS WISHING TO INCREASE THEIR PROFICIENCY IN LATIN-AMERICAN AFFAIRS CAN DO SO WITHOUT EXCESSIVE OVERCROWDING OF SCHEDULES. THESE COURSES ARE OF PARTICULAR VALUE TO STUDENTS WHO INTEND TO CARRY ON TECHNICAL OR PROFESSIONAL WORK IN THE LATIN AMERICAN AREA FOR THE GOVERNMENT, PRIVATE BUSINESS, PUBLICATIONS, OR RELIGIOUS ORGANIZATIONS.

LAW

DEPARTMENT OFFICE 209 LAW

COURSES FOR FIRST-YEAR LAW STUDENTS

LAW 302 CONTRACTS B.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
*3 HOURS, OR 1 UNIT
PATTERSON, GOBLE & JONES, CASES ON CONTRACTS, 4TH ED

LECT-DISC	A	10	FS	A LAW	LOISEAUX
	A	11	WTHFS	A LAW	LOISEAUX

LAW 304 TORTS B.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
*3 HOURS, OR 1 UNIT
PROSSER & SMITH, CASES ON TORTS 3D ED.

LECT-DISC	A	8	MTUWTH	A LAW	KRAUSE
	A	9	MTU	A LAW	KRAUSE

COURSES FOR ADVANCED LAW STUDENTS

LAW 325 PLEADING.
3 HOURS, OR 1 UNIT
CLEARY, CASES ON PLEADING, 2D ED.

LECT-DISC	A	10	MTUWTH	A LAW	CLEARY
	A	11	MTU	A LAW	CLEARY

LAW 334 CRIMINAL LAW ADMINISTRATION AND PROCEDURE.
2 HOURS, OR 1/2 UNIT
PAULSEN & KADISH, CRIMINAL LAW AND ITS PROCESSES, AND ILLINOIS CRIMINAL CODE.

LECT-DISC	A	1-3	MTU	A LAW	LAFAVE

LAW 335 TRIALS AND APPEALS.
3 HOURS, OR 1 UNIT
ROSENBURG & WEINSTEIN, ELEMENTS OF CIVIL PROCEDURE, AND EITHER FEDERAL RULES OF CIVIL PROCEDURE FOR UNITED STATES DISTRICT COURTS, 1963, OR HART & WECHSLER, JUDICIAL CODE AND RULES OF PROCEDURE IN THE FEDERAL COURTS, STUDENTS ED., 1962 REV.

LECT-DISC	A	8	FS	A LAW	STONE
	A	9	WTHFS	A LAW	STONE

LAW 342 MORTGAGES.
3 HOURS, OR 1 UNIT
OSBORNE, PROPERTY SECURITY, 2D ED.

LECT-DISC	A	10	FS	B LAW	CRIBBET
	A	11	WTHFS	B LAW	CRIBBET

LAW 355 TRADE REGULATION.
3 HOURS, OR 1 UNIT
SCHWARTZ, CASES ON FREE ENTERPRISE AND ECONOMIC ORGANIZATION, 2ND ED. AND 1962 SUPPLEMENT.

LECT-DISC	A	8	MTUWTH	B LAW	BAUM
	A	9	MTU	B LAW	BAUM

LAW 357 LEGAL ACCOUNTING.
2 HOURS
HERWITZ & TRAUTMAN, AMORY & HARDEES MATERIALS ON ACCOUNTING, 3RD ED.

LECT-DISC	A	1	WTHF	A LAW	YOUNG
	A	2	W	A LAW	YOUNG

LAW 361 PROBLEMS AND PROCEDURES IN OFFICE PRACTICE.
1 HOUR

LECT-DISC	A	3-5	W	A LAW	LAFAVE

LAW 365 FEDERAL TAX PROBLEMS.
1 HOUR

LECT-DISC	A	2-4	F	A LAW	YOUNG

LAW 399 RESEARCH ON SPECIAL TOPICS.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT

CONF	A	ARR	STAFF

COURSES FOR GRADUATES

LAW 499 THESIS RESEARCH.
1/2 TO 2 UNITS

CONF	A	ARR	STAFF

LIBRARY SCIENCE

DEPARTMENT OFFICE 331 LIB

FOR ALL STUDENTS

COLLOQUIUM--TALKS AND DISCUSSIONS BY PROMINENT LIBRARIANS AND OTHER LEADERS ASSOCIATED WITH LIBRARY INTERESTS, OR WITH THE PRODUCTION AND DISTRIBUTION OF BOOKS AND COMPARABLE MEDIA. ALL STUDENTS ARE REQUIRED TO ATTEND.
NO CREDIT

COURSES FOR ADVANCED UNDERGRADUATES

LIB S 201 INTRODUCTION TO REFERENCE.
3 HOURS

LECT-DISC	A	8	MTUW F	118	LIB	TRINKNER
	A	8-10	TH	118	LIB	TRINKNER
LECT-DISC	B	11	M WTHF	118	LIB	TRINKNER
	B	10-12	TU	118	LIB	TRINKNER

LIB S 204 DEVELOPMENT AND OPERATION OF LIBRARIES.
3 HOURS OR 2 HOURS IN SUMMER.

LECT-DISC		1	MTU THF	118	LIB	CHAIT

LIB S 255 ORGANIZATION OF LIBRARY MATERIALS.
PREREQUISITE--SENIOR STANDING.
3 HOURS

LECT-DISC	A	8	M WTHF	314	LIB	FOX
	A	8-10	TU	314	LIB	FOX
LECT-DISC	B	10	MTU THF	314	LIB	FOX
	B	9-11	W	314	LIB	FOX

LIB S 258 SELECTION OF LIBRARY MATERIALS.
3 HOURS, OR 2 HOURS IN SUMMER

LECT-DISC		2	MTU THF	118	LIB	STEVENS

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LIB S 302 LITERATURE OF SCIENCE AND TECHNOLOGY.
3 HOURS, OR 1 UNIT

LECT-DISC		8-10	M W F	428	LIB	JENKINS

LIB S 303 LIBRARY MATERIALS FOR CHILDREN.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC		9-11	M W F	118	LIB	CRAWFORD

LIB S 304 LIBRARY MATERIALS FOR YOUNG ADULTS.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC		1-3	M W F	309	LIB	CRAWFORD

LIB S 308 AUDIO-VISUAL SERVICES IN LIBRARIES.
3 HOURS, OR 1 UNIT
*ADDITIONAL HOUR ARRANGED FOR 1 UNIT CREDIT.

LECT-DISC		2-4	M F	314	LIB	GOLDSTEIN
		3-5	W	314	LIB	GOLDSTEIN

LIB S 402 STUDIES IN READING.
1 UNIT

LECT-DISC	1-3	M TH	428	LIB	LADLEY
	1	W	428	LIB	LADLEY

LIB S 405 LIBRARY ADMINISTRATION.
1 UNIT

LECT-DISC	3-5	M TH	118	LIB	CHAIT

LIB S 406 LIBRARY SERVICE TO CHILDREN AND YOUNG ADULTS.
PREREQUISITE--LIB.S. 204 OR 405.
1 UNIT

LECT-DISC	1-3	TU F	428	LIB	LADLEY
	2	W	428	LIB	LADLEY

LIB S 407 CATALOGING AND CLASSIFICATION, I.
1 UNIT

LECT-DISC	1	MTU THF	314	LIB	YOUNG
	1-3	W	314	LIB	YOUNG

LIB S 408 CATALOGING AND CLASSIFICATION, II.
PREREQUISITE--LIB.S. 407.
1 UNIT

LECT-DISC	3-5	TU F	328	LIB	YOUNG

LIB S 410 ADULT EDUCATION AND LIBRARIES.
1 UNIT

LECT-DISC	9-11	M W	328	LIB	GOLDSTEIN

LIB S 411 REFERENCE SERVICE IN THE HUMANITIES AND SOCIAL SCIENCES.
1 UNIT

LECT-DISC	11	MTU THF	428	LIB	STEVENS
	10-12	W	428	LIB	STEVENS

LIB S 412 REFERENCE SERVICE IN SCIENCE AND TECHNOLOGY.
1 UNIT

LECT-DISC	11	M W F	314	LIB	JENKINS
	11-1230	TU TH	314	LIB	JENKINS

LIB S 424 GOVERNMENT PUBLICATIONS.
PREREQUISITE--LIB. S. 411 OR 412, OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	8-10	TU TH	428	LIB	RIPS

LIB S 428 PHYSICAL PROBLEMS OF LIBRARIES.
PREREQUISITE--LIB.S. 405 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	10-12	TU F	328	LIB	HENDERSON

LIB S 430 ADVANCED REFERENCE.
PREREQUISITE--LIB.S. 424 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	3-5	M TH	428	LIB	RIPS

LIB S 433 ADVANCED SUBJECT BIBLIOGRAPHY.
SAME AS GEOG. 433.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*NO STUDENT MAY REGISTER MORE THAN TWICE FOR CREDIT TOWARD A DEGREE.
*1/2 UNIT
SECTION D-EDUCATION, SECTION F-JOURNALISM, SECTION I-MUSIC.

LECT-DISC	A	ARR			SAYLOR

LIB S 434 LARGER UNITS OF LIBRARY ORGANIZATION.
PREREQUISITE--LIB.S. 405 OR CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	3-5	TU F	428	LIB	HENDERSON

COURSES FOR ADVANCED GRADUATES

LIB S 450 ADVANCED PROBLEMS IN LIBRARIANSHIP.
PREREQUISITE--A FIFTH-YEAR DEGREE IN LIBRARY SCIENCE, CONSENT OF ASSOCIATE DIRECTOR.
1/2 TO 2 UNITS

CONF	ARR		STAFF

LIB S 499 THESIS RESEARCH.
MS CANDIDATES--0 TO 2 UNITS, PHD CANDIDATES--0 TO 4 UNITS

CONF	ARR		STAFF

LINGUISTICS

DEPARTMENT OFFICE 120 DAVENPORT HOUSE

A GRADUATE PROGRAM LEADING TO THE DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY IN LINGUISTICS IS OFFERED BY THE DIVISION OF SOCIAL SCIENCES. THE FOLLOWING FIELDS OF LINGUISTICS ARE AVAILABLE AND INTERDISCIPLINARY STUDY IN PSYCHOLINGUISTICS, ETHNOLINGUISTICS, AND EXPERIMENTAL PHONETICS.

UNDERGRADUATE PREPARATION FOR THE STUDY OF LINGUISTICS SHOULD INCLUDE THE EQUIVALENT OR AT LEAST THREE YEARS OF FOREIGN-LANGUAGE EXPERIENCE, FOR HISTORICAL LINGUISTICS A BROAD BACKGROUND IN THE LIBERAL ARTS AND SCIENCES, AND FOR DESCRIPTIVE LINGUISTICS THE EQUIVALENT OF GOOD UNDERGRADUATE TRAINING IN MATHEMATICS AND THE SCIENCES IS DESIRABLE. STUDENTS APPLYING FOR ADMISSION MUST HAVE AT LEAST A 3.5 GRADE POINT AVERAGE FOR THAT PORTION OF THE WORK WHICH REPRESENTS THE LAST SIXTY HOURS EARNED TOWARDS THE BACHELORS DEGREE, EXCLUSIVE OF REQUIRED PHYSICAL EDUCATION, MILITARY TRAINING, RELIGIOUS SUBJECTS, AND THE LIKE.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LING 300 INTRODUCTION TO LINGUISTICS.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC		2	MTUWTHF	209	E B	LEES
		9	S	209	E B	

LING 301 GENERAL PHONETICS.
SAME AS SPCH. 301.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	C	10	MTUWTH	304	L H	HULTZEN
	C	3	TU TH	330	I H	

LING 302 COMPARATIVE LINGUISTICS.
PREREQUISITE--FULFILLMENT OF FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES OR THE EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC		9	MTUWTHF	425A	LIB	KAHANE
		10	F	425A	LIB	

MANAGEMENT

DEPARTMENT OFFICE 317B D K H

COURSES FOR UNDERGRADUATES

MGMT 101 INDUSTRIAL ORGANIZATION AND MANAGEMENT.
PREREQUISITE--ECON. 102 OR CONSENT OF INSTRUCTOR, FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN IN BOTH MGMT. 101 AND I. E. 237.
*3 HOURS
LECT-DISC A 8 MTUWTHFS 307 D K H

COURSES FOR ADVANCED UNDERGRADUATES

MGMT 248 PERSONNEL ADMINISTRATION.
PREREQUISITE--ECON. 102 OR 108.
3 HOURS
LECT-DISC D 11 MTUWTHFS 307 D K H

COURSES FOR GRADUATES

MGMT 416 PROBLEMS IN BUSINESS POLICY.
1 UNIT
LECT-DISC 10-12 TU TH 420 D K H

MGMT 499 THESIS RESEARCH.
1 UNIT
CONF ARR

MARKETING

DEPARTMENT OFFICE 411 D K H

COURSES FOR UNDERGRADUATES

MKTG 101 PRINCIPLES OF MARKETING.
PREREQUISITE--ECON. 102 OR 108, AND FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN IN BOTH MKTG. 101 AND 272.
*3 HOURS

LECT-DISC	A	8	MTUWTHF	306	D K H	SCOTTON
	A	2	M	306	D K H	

MKTG 332 LIVESTOCK MARKETING.
SAME AS AN. S. AND AG. EC. 332.
PREREQUISITE--ECON. 108, AG. EC. 230 OR MKTG. 101.
FIELD TRIP, ESTIMATED EXPENSE, $10.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	MTUW F	316S	M H	BROADBENT
	A	7-9	TH	316S	M H	

MKTG 373 SALES MANAGEMENT.
PREREQUISITE--MKTG. 101 OR 272.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	B	9	MTUWTHF	306	D K H	SCOTTON
	B	3	M	306	D K H	SCOTTON

MKTG 388 ADVERTISING IN CONTEMPORARY SOCIETY.
SAME AS ADV. 388.
PREREQUISITE--MKTG. 287 OR ADV. 281 OR CONSENT OF INSTRUCTOR.
*GRADUATE CREDIT IS NOT GIVEN FOR BOTH MKTG. 388 AND MKTG. 481.
*2 HOURS, OR 1/2 UNIT

LECT-DISC	D	11	MTUWTH	123	G H	MOYER

COURSES FOR GRADUATES

MKTG 401 MARKETING PRINCIPLES AND PROBLEMS.
1 UNIT

LECT-DISC		10-12	M W	420	D K H	HUEGY

MKTG 493 RESEARCH IN SPECIAL FIELDS.
1/4 TO 2 UNITS

CONF		ARR				HUEGY

MKTG 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*CLASS MEETS ON ALTERNATE MONDAYS.

DISC		2-4	TU	420	D K H	HUEGY

MATHEMATICS

DEPARTMENT OFFICE 273 A H

MAJCR IN MATHEMATICS

MAJOR--TWENTY HOURS IN MATHEMATICS, EXCLUDING COURSES WITH NUMBERS LESS THAN 130, AND INCLUDING THREE COURSES CHOSEN FROM MATH. 317, 318, 327, 328, 332, 333, 347, 348, 353, 354.

PSYCHOLOGY, STATISTICS--MATH. 161, 361, 362, 363, 364, 375, SURVEYING, THEORETIC AND APPLIED MECHANICS.
DEPARTMENTAL HONORS. ENTERING STUDENTS WITH SUPERIOR MATHEMATICAL ABILITY SHOULD APPLY TO THE DEPARTMENT OF MATHEMATICS, 273 ALTGELD HALL, FOR INFORMATION REGARDING THE HONORS COURSE, MATH. 149. INFORMATION REGARDING REQUIREMENTS FOR GRADUATION WITH DISTINCTION IN MATHEMATICS IS AVAILABLE FROM DR. J. W. PETERS, 269 ALTGELD HALL.

NOTE--AN ENTERING STUDENT WITH AN ADEQUATE PREPARATION IN HIGH SCHOOL MATHEMATICS SHOULD ENROLL IN ANALYTIC GEOMETRY, MATH. 122 OR 123, DURING THE FIRST SEMESTER, AND IN THE CALCULUS, MATH. 132 OR 133, DURING THE SECOND SEMESTER OF HIS FRESHMAN YEAR. ADMISSION TO ANALYTIC GEOMETRY NORMALLY REQUIRES A PASSING GRADE ON THE MATHEMATICS PLACEMENT TEST. A STUDENT INELIGIBLE FOR ANALYTIC GEOMETRY SHOULD ENROLL IN ALGEBRA, MATH. 111 OR 112, AND TRIGONOMETRY, MATH. 114, DURING HIS FIRST SEMESTER.

UNDERGRADUATE STUDENTS INTENDING TO TAKE ADVANCED WORK OR A MAJOR IN MATHEMATICS SHOULD COMPLETE THE SECOND SEMESTER OF THE CALCULUS, MATH. 142 OR 143, AS EARLY AS POSSIBLE. OF THE VARIOUS COURSES OFFERED AT THE 300 LEVEL, THE INTRODUCTORY COURSES IN ALGEBRA, 317, 318, IN GEOMETRY, 327, 328, IN TOPOLOGY, 332, 333, AND IN ANALYSIS, 347, 348 ARE BASIC FOR MORE ADVANCED WORK IN MATHEMATICS. MANY OF THE OTHER 300 LEVEL COURSES ARE DESIGNED TO SERVE STUDENTS WHO ANTICIPATE A RELATIVELY EARLY TERMINATION OF THEIR COURSE WORK IN MATHEMATICS, THESE STUDENTS MIGHT PREFER THE COURSES THAT RELATE INTERMEDIATE MATHEMATICS TO THEIR SPECIALIZED AREAS OF INTEREST. STUDENTS PREPARING TO TEACH HIGH SCHOOL OR COLLEGE MATHEMATICS, OR THOSE INTERESTED IN MATHEMATICS AS A CAREER SHOULD CONSULT WITH DR. J. W. PETERS, 269 ALTGELD HALL, CONCERNING THEIR PROGRAM AT THE EARLIEST POSSIBLE MOMENT AFTER ENTERING THE UNIVERSITY.

MAJOR IN STATISTICS

MAJOR--TWELVE HOURS BEYOND CALCULUS INCLUDING MATH. 315, 347, 363, AND THREE OTHER HOURS OF 300 COURSES IN STATISTICS IN THE DEPARTMENT OF MATHEMATICS.

MINORS--TWENTY HOURS IN ONE SUBJECT APPROVED BY THE DEPARTMENT OF MATHEMATICS. OF THESE TWENTY HOURS NOT MORE THAN NINE MAY BE IN STATISTICAL METHODS, AND MATH. 161 MAY BE TAKEN AS THREE OF THESE HOURS. THE COURSES NOT EMPHASIZING STATISTICAL METHODS SHOULD BE CHOSEN SO THAT COURSES ON THE 400 LEVEL CAN BE TAKEN IF THE STUDENT ENTERS GRADUATE COLLEGE.

MAJOR IN ACTUARIAL SCIENCE

MAJOR--ONE YEAR OF CALCULUS AND AT LEAST FIVE COURSES CHOSEN FROM THE FOLLOWING--MATH. 295, 311, 312, 362, 363, 371, 372,

MINORS--TWENTY HOURS CHOSEN FROM THE FOLLOWING--FIN. 259, 260, 262, 263, 360, 363, 366, 367.

NOTE--STUDENTS ARE URGED TO ELECT ACCY. 201 AND B. LAW 261 IN THEIR JUNIOR YEAR.

COURSES FOR UNDERGRADUATES

MATH 111 ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1 UNIT, PLANE GEOMETRY, 1 UNIT. STUDENTS HAVING 1-1/2 OR MORE UNITS OF HIGH SCHOOL ALGEBRA MAY NOT TAKE THIS COURSE UNLESS THEY HAVE THE APPROVAL OF THEIR COLLEGE OFFICE
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT-DISC	A1	8-10	MTUWTHF	102	A H
LECT-DISC	C1	10-12	MTUWTHF	102	A H

MATH 112 COLLEGE ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, PLANE GEOMETRY, 1 UNIT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	B1	9	MTUWTHFS	108	A H
LECT-DISC	C1	10	MTUWTHFS	108	A H

MATH 114 PLANE TRIGONOMETRY.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, OR REGISTRATION IN MATH 111, PLANE GEOMETRY, 1 UNIT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

LECT-DISC	A1	8	TUWTHF	108	A H
LECT-DISC	D1	11	TUWTHF	108	A H

MATH 123 ANALYTIC GEOMETRY.
PREREQUISITE--MATH. 111 OR 112, AND 114.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT-DISC	A1	8-10	MTUWTHF	110	A H
LECT-DISC	B1	9-11	MTUWTHF	145	A H
LECT-DISC	C1	10-12	MTUWTHF	110	A H

MATH 133 CALCULUS, I.
PREREQUISITE--MATH. 122 OR 123.
3 HOURS

LECT-DISC	B1	9	MTUWTHFS	147	A H
LECT-DISC	B2	9	MTUWTHFS	155	A H
LECT-DISC	C1	10	MTUWTHFS	147	A H

```
MATH  142     CALCULUS, II.
         PREREQUISITE--MATH. 132.
         3 HOURS
                LECT-DISC  A1      8        MTUWTHFS  145  A H
                LECT-DISC  B1      9        MTUWTHFS  159  A H


MATH  143     CALCULUS, II.
         PREREQUISITE--MATH. 133.
         5 HOURS
                LECT-DISC  A1      8-10     MTUWTHF   165  A H
                LECT-DISC  B1      9-11     MTUWTHF   169  A H


MATH  195     INTRODUCTION TO AUTOMATIC DIGITAL COMPUTING.
         PREREQUISITE--SOPHOMORE STANDING AND ONE YEAR OF COLLEGE
         MATHEMATICS, INCLUDING DIFFERENTIAL CALCULUS.
         3 HOURS
                LECT-DISC  B1      9-11     M  W  F   151  E E B          BREARLY


                          COURSES FOR ADVANCED UNDERGRADUATES


MATH  202     MATHEMATICS FOR ELEMENTARY TEACHERS, I.
         PREREQUISITE--JUNIOR STANDING IN ELEMENTARY EDUCATION.
         *NO CREDIT FOR L. A. AND S. STUDENTS.
         *5 HOURS
                LECT-DISC  C1     10-12     MTUWTHF   314  A H            BARTRAM


MATH  291     THESIS AND READING COURSE.
         PREREQUISITE--MATH. 347 WITH GRADE OF B OR BETTER, OR CONSENT OF
         MATHEMATICS HONORS COMMITTEE.
         2 HOURS
                DISC             ARR


MATH  299     PROBLEM SEMINAR AND INTRODUCTION TO RESEARCH.
         PREREQUISITE--CALCULUS AND CONSENT OF INSTRUCTOR.
         3 HOURS

                   COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES
                CONF             ARR


                   COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES


MATH  300     THE THEORY OF SETS AND THE REAL NUMBER SYSTEM.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
         *SECTIONS Y1 AND Y2 ARE 12 WEEK COURSES FOR TEACHERS ONLY.
                LECT-DISC  C1     10        MTUWTHF   155  A H
                           C1      3           TH     155  A H
                LECT-DISC  D1     11        MTUWTHF   145  A H            SCHROER
                           D1      3        M         145  A H
                LECT-DISC *Y1    ARR
                LECT-DISC *Y2    ARR


MATH  302     FUNDAMENTAL CONCEPTS OF GEOMETRY.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
                LECT-DISC  A1      8        MTUWTHF    59  E E B          PETERS
                           A1      3         TU        59  E E B


MATH  306     SELECTED MATHEMATICAL TOPICS FOR SECONDARY SCHOOL TEACHERS, I.
         PREREQUISITE--ONE YEAR OF SECONDARY SCHOOL TEACHING IN MATHEMATICS
         OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1/2 OR 1 UNIT
         *SECTIONS Y1 AND Y2 ARE 10 WEEK COURSES FOR TEACHERS ONLY.
                LECT-DISC *Y1    ARR
                LECT-DISC *Y2    ARR


MATH  311     ADVANCED ALGEBRA.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
                LECT-DISC  B1      9        MTUWTHF   247  A H            MILES
                           B1      3           W      247  A H
```

```
MATH  315     LINEAR TRANSFORMATIONS AND MATRICES.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS, OR 1 UNIT
                LECT-DISC  B1      9        MTUWTHFS  173  A H          SANWAL
                LECT-DISC  C1     10        MTUWTHFS  173  A H          SINGAL
                LECT-DISC  D1     11        MTUWTHFS  173  A H


MATH  317     INTRODUCTION TO HIGHER ALGEBRA, I.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS, OR 1 UNIT
                LECT-DISC  B1      9        MTUWTHF   241  A H          PALEY
                           B1      3           W      241  A H
                LECT-DISC  D1     11        MTUWTHF   241  A H          ARMSTRONG
                           D1      3        M         241  A H


MATH  318     INTRODUCTION TO HIGHER ALGEBRA, II.
         PREREQUISITE--MATH. 317.
         3 HOURS, OR 1 UNIT
         *SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.
                LECT-DISC *S1      9        MTUWTH    167  E E B
                LECT-DISC  B1      9        MTUWTHF   245  A H          OSBORN
                           B1      3           W      245  A H
                LECT-DISC  D1     11        MTUWTHF   257  A H          HOHN
                           D1      3        M         257  A H


MATH  332     TOPOLOGICAL SPACES.
         PREREQUISITE--CREDIT OR REGISTRATION IN MATH 347.
         3 HOURS, OR 1 UNIT
         *SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.
                LECT-DISC  D1     11        MTUWTHF   169  A H          SINGAL
                           D1      3        M         169  A H
                LECT-DISC *S1      2        MTUWTH    167  E E B


MATH  343     ADVANCED CALCULUS.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS, OR 1 UNIT
                LECT-DISC  A1      8        MTUWTHFS  147  A H
                LECT-DISC  B1      9        MTUWTHFS  341  A H
                LECT-DISC  C1     10        MTUWTHFS  243  A H
                LECT-DISC  D1     11        MTUWTHFS  147  A H


MATH  345     DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         *CREDIT IS NOT GIVEN FOR BOTH MATH. 345 AND MATH. 349.
         *3 HOURS, OR 1 UNIT
                LECT-DISC  A1      8        MTUWTHFS  155  A H
                LECT-DISC  C1     10        MTUWTHFS  245  A H
                LECT-DISC  D1     11        MTUWTHFS  155  A H


MATH  346     COMPLEX VARIABLES AND APPLICATIONS.
         PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
         *CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND MATH. 348.
         *3 HOURS, OR 1 UNIT
                LECT-DISC  A1      8        MTUWTHFS  159  A H          WITZ
                LECT-DISC  B1      9        MTUWTHFS  243  A H          GRANIRER
                LECT-DISC  D1     11        MTUWTHFS  159  A H


MATH  347     INTRODUCTION TO HIGHER ANALYSIS, REAL VARIABLES.
         PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
                LECT-DISC  B1      9        MTUWTHF   257  A H
                           B1      3           W      257  A H
                LECT-DISC  C1     10        MTUWTHF   159  A H          SANWAL
                           C1      3           TH     159  A H


MATH  348     INTRODUCTION TO HIGHER ANALYSIS--COMPLEX VARIABLES.
         PREREQUISITE--MATH. 347.
         *CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND 348.
         *3 HOURS, OR 1 UNIT
                LECT-DISC  D1     11        MTUWTHF   245  A H          ORLAND
                           D1      3        M         245  A H
```

MATH 363 ADVANCED STATISTICS, I.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

LECT-DISC	C1	10	MTUWTHF	167	E E B	PATHAK
	C1	3	TH	167	E E B	

MATH 387 INTRODUCTION TO NUMERICAL ANALYSIS.
PREREQUISITE--SENIOR STANDING, CALCULUS, AND A COURSE IN DIFFERENTIAL EQUATIONS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

LECT-DISC	A1	8	MTUWTHF	314	A H	G BELFORD
	A1	3	TU	314	A H	

MATH 388 MATHEMATICAL METHODS IN ENGINEERING AND SCIENCE.
PREREQUISITE--MATH. 343.
3 HOURS, OR 1 UNIT

LECT-DISC	B1	9	MTUWTHF	314	A H	KETCHUM
	B1	3	W	314	A H	KETCHUM

COURSES FOR GRADUATES

MATH 401 SECOND COURSE IN ABSTRACT ALGEBRA, I.
PREREQUISITE--MATH. 317 AND 318.
1 UNIT

LECT-DISC	E1	1	MTUWTHF	167	E E B	BROWN

MATH 402 SECOND COURSE IN ABSTRACT ALGEBRA, II.
PREREQUISITE--MATH. 401.
1 UNIT

LECT-DISC	B1	9	MTUWTHF	59	E E B	LEAHEY

MATH 441 FUNCTIONS OF REAL VARIABLES.
PREREQUISITE--MATH. 347.
1 UNIT

LECT-DISC	D1	11	MTUWTHF	59	E E B	KETCHUM

MATH 442 MEASURE AND INTEGRATION.
PREREQUISITE--MATH. 347, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	C1	10	MTUWTHF	59	E E B	ALEXANDER

MATH 468 TOPICS IN ANALYSIS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

LECT-DISC	*S1	11	MTUWTH	167	E E B	

MATH 490 READING COURSE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS

DISC		ARR

MATH 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

DISC		ARR

MECHANICAL ENGINEERING

DEPARTMENT OFFICE 144 M E B

COURSES FOR ADVANCED UNDERGRADUATES

M E 224 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 221, OR M E 222, T A M 221, CREDIT OR REGISTRATION IN T A M 223.
3 HOURS

LECT-DISC	P	10-12	MTUWTHFS	336 M E B	BAYNE

M E 234 HEAT TREATMENT OF METALS.
PREREQUISITE--T A M 221, CREDIT OR REGISTRATION IN M E 224 AND T A M 223.
3 HOURS

LECT-DISC	P	1	MTUWTH	110 M E B	SINGER,
LAB	P	2-5	TU TH	110 M E B	RAMALINGAM
	P	2-5	TU TH	114 M E B	

M E 263 APPLICATION OF ENERGY CONCEPTS TO POWER PROCESSES.
PREREQUISITE--M.E. 206 AND 212.
5 HOURS

LECT-DISC	P	7	MTUWTH	204 M E L	STAFF
	P	8-10	F	204 M E L	
LAB	P	8-10	MTUWTH	204 M E L	
	P	8-10	MTUWTH	101 M E B	
	P	8-10	MTUWTH	M E LAB	

M E 264 HEAT POWER LABORATORY.
PREREQUISITE--M E 212 AND 263.
3 HOURS

LAB	P	8-10	MTUWTHFS	204 M E L	STAFF
	P	8-10	MTUWTHFS	101 M E B	
	P	8-10	MTUWTHFS	M E LAB	

M E 271 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 224.
3 HOURS

LECT-DISC	P	10-12	MTUWTHFS	343 M E B	GREFFE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

M E 306 INDUSTRIAL HEAT TRANSFER.
PREREQUISITE--UNDERGRADUATE COURSES IN FLUID MECHANICS AND HEAT TRANSFER.
4 HOURS, OR 1 UNIT

LECT-DISC		ARR		136 M E B	MERING

M E 341 ENGINEERING ANALYSIS AND DESIGN.
PREREQUISITE--M E 271, SENIOR STANDING, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT
THIS COURSE FOR THE SUMMER OF 1964 WILL BE OFFERED ONLY TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. COURSE MAY BE REPEATED FOR A TOTAL OF 4 UNITS.

LECT-DISC		10-12	MTUWTHF	349 M E B	BROGHAMER

COURSES FOR GRADUATES

M E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	

METALLURGICAL ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR GRADUATES

MET E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR

MICROBIOLOGY

DEPARTMENT OFFICE 127 BURRILL HALL

MAJOR--TWENTY HOURS OF MICROBIOLOGY, INCLUDING EITHER MICROBIOLOGY 100 AND 101, OR MICROBIOLOGY 200 AND 201. BOTANY 322 OR ZOOLOGY 351, AND CHEMISTRY 340, 350 AND 355 MAY BE SUBSTITUTED FOR MICROBIOLOGY COURSES TO THE EXTENT OF FIVE HOURS AS PART OF THE MAJOR. QUANTITATIVE AND ORGANIC CHEMISTRY, COLLEGE ALGEBRA, AND TRIGONOMETRY ARE REQUIRED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, BIOLOGY, BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, PHYSICS, PHYSIOLOGY, AND ZOOLOGY. NO COURSE MAY APPLY TO BOTH THE MAJOR AND THE MINOR.

COURSES FOR UNDERGRADUATES

MCBIO 100 INTRODUCTORY MICROBIOLOGY.
3 HOURS

LECT	8	MTUWTHF	124	BUR HALL	MCCAMISH

MCBIO 101 INTRODUCTORY EXPERIMENTAL MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 100.
2 HOURS

LAB	9-12	M W	242	BUR HALL	MCCAMISH AND
	9-11	F	242	BUR HALL	ASSISTANTS

COURSES FOR ADVANCED UNDERGRADUATES

MCBIO 207 RESEARCH AND SPECIAL PROBLEMS.
PREREQUISITE--FIFTEEN HOURS OF MICROBIOLOGY, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 10 HOURS.
*3 TO 5 HOURS

LAB-DISC	ARR		BUR HALL	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MCBIO 311 FOOD AND INDUSTRIAL MICROBIOLOGY.
PREREQUISITE--MCBIO. 101 OR 201 OR 309 OR EQUIVALENT AND CREDIT OR REGISTRATION IN ORGANIC CHEMISTRY, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

LECT	8	MTUWTHF	136	BUR HALL	CLARK

MCBIO 312 TECHNIQUES OF APPLIED MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 311.
2 HOURS, OR 1/2 UNIT

LAB	9-12	M W F	202	BUR HALL	CLARK AND HELM

COURSES FOR GRADUATES

MCBIO 490 INDIVIDUAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR
1/2 TO 2 UNITS

LAB	ARR	BUR HALL	STAFF

MCBIO 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

LAB	ARR	BUR HALL	STAFF

MINING ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR GRADUATES

MIN E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR

MUSIC

DEPARTMENT OFFICE 100 S M H

COURSES FOR UNDERGRADUATES

MUSIC 106 COMPOSITION.
PREREQUISITE--QUALIFYING EXAMINATION IN COMPOSITION, TO BE ADMINISTERED BY THE THEORY-COMPOSITION FACULTY.
2 HOURS, SUMMER--2, 3, OR 4 HOURS
STUDENTS DESIRING TO SATISFY FRESHMAN THEORY REQUIREMENTS MAY TAKE THIS COURSE.

LECT-DISC	A	8-10	MTUWTH	106	S M H	G JOHNSON
LECT-DISC	B	8-10	MTUWTH	103	S M H	FREDRICKSON
CONF	C	ARR		203	T A	FREDRICKSON

MUSIC 130 INTRODUCTION TO THE ART OF MUSIC, I.
FOR NON-MUSIC STUDENTS ONLY.
3 HOURS

LECT-DISC	A	9	MTUWTH	25	S M H	HANSELL

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 241 MUSIC FOR ELEMENTARY TEACHERS, II.
PREREQUISITE--MUSIC 240. REQUIRED FOR STATE ELEMENTARY SCHOOL CERTIFICATE BUT NO CREDIT GRANTED IN SCHOOL OF MUSIC.
3 HOURS

LECT-DISC	A	8	TUWTHF	116	1203 W NEV	R THOMAS

MUSIC 301 FUGUE.
PREREQUISITE--MUSIC 300 AND/OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	1	TUWTHF	104	1203 W NEV		H JOHNSON

MUSIC 305 ANALYTICAL TECHNIQUES, II.
PREREQUISITE--MUSIC 304 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	9	TUWTHF	8	S A		H JOHNSON

MUSIC 306 COMPOSITION.
PREREQUISITE--MUSIC 104 OR 106 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT

CONF	A	ARR		203	T A		FREDRICKSON

MUSIC 311 MUSIC IN THE RENAISSANCE.
PREREQUISITE--MUSIC 214 OR 310.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	10	MTUWTH	116	1203 W NEV		SIEBERT

MUSIC 313 MUSIC OF THE NINETEENTH AND TWENTIETH CENTURIES.
PREREQUISITE-- MUSIC 214 OR 312.
3 HOURS, OR 1/2 UNIT

LECT-DISC	A	9	MTUWTH	104	1203 W NEV		RINGER

MUSIC 330 APPLIED MUSIC PEDAGOGY.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 HOURS, OR 1 UNIT
*2 HOURS, OR 1/2 UNIT
SECTION A-PIANO, SECTION B-STRINGS
*EMPHASIS WILL BE PLACED ON MATERIALS FOR PUBLIC SCHOOLS.

LECT-DISC	A	9	TUWTHF	200A	S M H		LYKE
LECT-DISC	*B	9	TUWTHF	5	S M H		WALLER

MUSIC 333 CHURCH MUSIC TECHNIQUES.
PREREQUISITE--MUSIC 332 OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	2	TUWTHF	103	S M H		HAMILTON

MUSIC 341 ADVANCED INSTRUMENTAL ADMINISTRATION.
PREREQUISITE--ADVANCED UNDERGRADUATE OR GRADUATE WITH MAJOR WORK OR EXPERIENCE IN BAND OR ORCHESTRA.
4 HOURS, OR 1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED

LECT-DISC	A	1	MTUWTHF	228	BAND		KISINGER

MUSIC 345 TEACHING TECHNIQUES OF MUSIC THEORY.
PREREQUISITE--MUSIC 300 OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	10	TUWTHF	106	S M H		CARTER

MUSIC 346 WORKSHOP IN MUSIC EDUCATION.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*2 OR 4 HOURS, OR 1/2 OR 1 UNIT
SECTION A-WORKSHOP FOR ELEMENTARY CLASSROOM TEACHERS WITH AT LEAST ONE YEAR OF TEACHING EXPERIENCE.
SECTION B-WORKSHOP IN TECHNIQUES AND LITERATURE FOR JUNIOR HIGH SCHOOL TEACHERS.
SECTION C-WORKSHOP IN THE PREPARATION AND PRESENTATION OF PUBLIC MUSIC PERFORMANCES INCLUDING OPERETTAS, VARIETY SHOWS, AND SPECIAL PROGRAMS. CONCURRENT REGISTRATION IN MUSIC 323B IS REQUIRED.

LECT-DISC	A	10	TUWTHF	102	S H		R THOMAS
LECT-DISC	B	11	TUWTHF	116	1203 W NEV		SHERMAN
LECT-DISC	C	3	TUWTHF	104	1203 W NEV		RAFFERTY

MUSIC 348 TEACHING OF BRASS INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	8	TUWTHF	14	S M H	GRAY, HOLDEN, SEXTON

MUSIC 349 MUSIC IN EARLY CHILDHOOD.
PREREQUISITE--SENIOR OR GRADUATE LEVEL IN MUSIC EDUCATION OR CHILD DEVELOPMENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC	A	1	TUWTHF	116	1203 W NEV	SMITH

COURSES FOR GRADUATES

MUSIC 406 COMPOSITION.
1/2 TO 1 1/2 UNITS

CONF	A	ARR		202	T A	H JOHNSON

MUSIC 418 THE ORIGINS AND HISTORY OF OPERA UP TO GLUCK.
PREREQUISITE--MUSIC 312 OR CONSENT OF INSTRUCTOR.
1/2 UNIT

LECT-DISC	A	1-3	M W	201	H A	HAMM

MUSIC 430 ADVANCED ORCHESTRA CONDUCTING AND LITERATURE.
PREREQUISITE--PREVIOUS CONDUCTING EXPERIENCE.
1 UNIT

LECT-DISC	A	11	TUWTHF	104	1203 W NEV	ROBERTSON

MUSIC 432 ADVANCED CHORAL TECHNIQUES.
PREREQUISITE--GRADUATE STANDING IN MUSIC.
1 UNIT

LECT-DISC	A	11-1	TUWTHF	25	S M H	KIRK

MUSIC 438 WIND INSTRUMENT LITERATURE.
•STUDENTS MAY ACCUMULATE TWO UNITS.
•1 UNIT
•SECTION A--BRASS

LECT-DISC	A	2	TUWTHF	228	BAND	KISINGER

MUSIC 440 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION, I.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

LECT-DISC	A	8	TUWTHF	104	1203 W NEV	LEONHARD

MUSIC 442 THE GENERAL MUSIC PROGRAM IN SECONDARY SCHOOLS.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION.
1/2 OR 1 UNIT

LECT-DISC	A	10	TUWTHF	104	1203 W NEV	LEONHARD

MUSIC 443 ADMINISTRATION AND SUPERVISION OF MUSIC EDUCATION.
PREREQUISITE--GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION.
1/2 OR 1 UNIT

LECT-DISC	A	9	TUWTHF	116	1203 W NEV	COLWELL

MUSIC 450 HISTORY OF VOCAL ENSEMBLE AND CHORAL MUSIC, I.
1/2 UNIT

LECT-DISC	A	11	MTUWTH	101	H A	HAMM

APPLIED MUSIC

NOTE--STUDENTS IN MUSIC CURRICULA RECEIVE THREE OR FOUR HOURS FOR THEIR MAJOR OR PRINCIPAL SUBJECT.

AS A PART OF THE REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE, SENIOR STUDENTS MUST PRESENT A PUBLIC RECITAL WHICH MEETS WITH SCHOOL OF MUSIC FACULTY APPROVAL AND CONFORMS WITH DEPARTMENTAL REQUIREMENTS.

MUSIC STUDENTS RECEIVE TWO HOURS CREDIT FOR THEIR MINOR OR SECONDARY SUBJECT.

STUDENTS FROM OTHER COLLEGES RECEIVE TWO HOURS CREDIT FOR WORK IN APPLIED MUSIC IF IN ACCORDANCE WITH THE REGULATIONS OF THEIR COLLEGE PASSING OF A PERFORMING EXAMINATION IS REQUIRED AS A PREREQUISITE TO THE INITIAL REGISTRATION IN ANY APPLIED MUSIC COURSE.

COURSES FOR UNDERGRADUATES

MUSIC 180 PIANO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	204	S M H	RICHARDS
CONF	B	ARR	205	S M H	BILSON
CONF	C	ARR	200A	S M H	RUPPEL

MUSIC 181 VOICE.
2 OR 3 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	211	S M H	FOOTE
CONF	B	ARR	203	S M H	BAILEY
CONF	C	ARR	210	S H	G WILSON
CONF	D	ARR	206	S H	SCHLEICHER

MUSIC 182 ORGAN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS.

CONF	A	ARR	200	S M H	HAMILTON

MUSIC 183 VIOLIN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	202	S A	ROLLAND
CONF	B	ARR	205	S A	FARMER

MUSIC 184 VIOLA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	202	S A	ROLLAND

MUSIC 185 CELLO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	201	S A	SWENSON

MUSIC 186 STRING BASS.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	9	S M H	KROLICK

MUSIC 187 FLUTE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	10	S M H	NANZETTA

MUSIC 188 CLARINET.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	11	S M H	MCDOWELL

MUSIC 189 OBOE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

CONF	A	ARR	2	S M H	WILLIAMS

MUSIC 190 BASSOON.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 203 S H BERRY

MUSIC 191 CORNET AND TRUMPET.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 14 S M H SEXTON

MUSIC 192 FRENCH HORN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 4 S M H HOLDEN

MUSIC 193 TROMBONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 8 S M H GRAY

MUSIC 194 BARITONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 8 S M H GRAY

MUSIC 195 TUBA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 8 S M H GRAY

MUSIC 196 PERCUSSION.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 6 S M H FROCK

MUSIC 198 ALTO SAXOPHONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS
CONF A ARR 11 S M H MCDOWELL

APPLIED MUSIC COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PREREQUISITE--FOR STUDENTS IN THE BACHELOR OF MUSIC CURRICULUM, JUNIOR STANDING IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN MUSIC EDUCATION, COMPLETION OF THE CURRICULAR REQUIREMENT IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN OTHER COLLEGES OF THE UNIVERSITY, COMPLETION OF FOUR SEMESTERS IN THE COMPARABLE APPLIED MUSIC COURSE AT THE 100 LEVEL.

MUSIC 380 PIANO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 204 S M H RICHARDS
CONF B ARR 205 S M H BILSON

MUSIC 381 VOICE.
2 OR 3 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 211 S M H FOOTE
CONF B ARR 203 S M H BAILEY
CONF C ARR 210 S H G WILSON

MUSIC 382 ORGAN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 200 S M H HAMILTON

MUSIC 383 VIOLIN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 202 S A ROLLAND

MUSIC 384 VIOLA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 202 S A ROLLAND

MUSIC 385 CELLO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 201 S A SWENSON

MUSIC 386 STRING BASS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 9 S M H KROLICK

MUSIC 387 FLUTE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 10 S M H NANZETTA

MUSIC 388 CLARINET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 11 S M H MCDOWELL

MUSIC 389 OBOE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 2 S M H WILLIAMS

MUSIC 390 BASSOON.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 203 S H BERRY

MUSIC 391 CORNET AND TRUMPET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 14 S M H SEXTON

MUSIC 392 FRENCH HORN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 4 S M H HOLDEN

MUSIC 393 TROMBONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 8 S M H GRAY

MUSIC 394 BARITONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 8 S M H GRAY

MUSIC 395 TUBA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 8 S M H GRAY

MUSIC 396 PERCUSSION.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 6 S M H FROCK

MUSIC 398 SAXOPHONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
CONF A ARR 11 S M H MCDOWELL

APPLIED MUSIC COURSES FOR GRADUATES

MUSIC 480 PIANO.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF A ARR 204 S M H RICHARDS AND PIANO FACULTY

MUSIC 481 VOICE.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
CONF A ARR 211 S M H FOOTE AND VOICE FACULTY

MUSIC 482 ORGAN.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

CONF	A	ARR	200A	S M H		HAMILTON

MUSIC 483 STRING INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

CONF	A	ARR	202	S A		ROLLAND AND STRING FACULTY

MUSIC 484 WIND INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

CONF	A	ARR	11	S M H		MCDOWELL AND WIND FACULTY

MUSIC 485 PERCUSSION INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

CONF	A	ARR	6	S M H		FROCK

MUSIC 489 DOCTORAL PROJECTS.
OPEN ONLY TO STUDENTS IN THE DOCTOR OF MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 3 UNITS

CONF	A	ARR	210	1203 W NEV		GOLDTHWAITE AND GRADUATE FACULTY

MUSIC 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF ADVISOR.
0 TO 4 UNITS, SUMMER--0 TO 2 UNITS

CONF	A	ARR	210	1203 W NEV		GOLDTHWAITE, V WILSON, AND GRADUATE FACULTY

SUPPLEMENTARY INSTRUMENTS

NOTE--THESE COURSES ARE OPEN AS ELECTIVES TO STUDENTS FROM OTHER COLLEGES. IN COURSES INVOLVING TWO INSTRUMENTS, TWO DAYS A WEEK ARE SPENT ON EACH INSTRUMENT FOR THE ENTIRE SEMESTER. PREREQUISITE FOR ALL NON-MUSIC STUDENTS--CONSENT OF INSTRUCTOR.

COURSES FOR UNDERGRADUATES

MUSIC 170 STRING INSTRUMENTS.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
2 HOURS
*SECTION A IS FOR BEGINNERS.

LAB-DISC	A	8	MTUWTHF	5	S M H		KROLICK, WALLER

MUSIC 177 CLASS PIANO INSTRUCTION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

LAB-DISC	A	8	TUWTHF	1	S H		LYKE
LAB-DISC	B	9	TUWTHF	1	S H		RUPPEL

COURSES FOR ADVANCED UNDERGRADUATES

ENSEMBLE COURSES

MUSIC 250 UNIVERSITY ORCHESTRA.
1/2 HOUR

PRACT	A	730-930PM	TU	RECITAL HALL		ROBERTSON

MUSIC 261 UNIVERSITY CHORUS.
NOTE--OPEN TO STUDENTS, FACULTY AND TOWNSPEOPLE.
1/2 HOUR

PRACT	A	12	TUWTHF	25	S M H	KIRK

MUSIC 265 OPERA WORKSHOP AND ENSEMBLE.
1/2 HOUR

PRACT	A	3-5	TU TH	25	S M H	ZIRNER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 350 ADVANCED ENSEMBLE MUSIC.
PREREQUISITE--REGISTRATION IN APPLIED MUSIC AT THE 300 LEVEL AND CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT, SUMMER--1 HOUR OR 1/4 UNIT
*SECTION A IS FOR INSTRUMENTAL.
*SECTION B IS FOR OPERATIC.

PRACT	A	ARR		201	S A	SWENSON
PRACT	B	4-6	W	25	S M H	ZIRNER

MUSIC LITERATURE COURSES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 320 PROSEMINAR.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 8 HOURS OR 2 UNITS.
*2 OR 4 HOURS, OR 1/2 OR 1 UNIT

CONF	A	ARR		210	1203 W NEV	GOLDTHWAITE AND FACULTY

MUSIC 323 OPERA PRODUCTION, I.
PREREQUISITE--MUSIC 265, 381, AND CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
*CONCURRENT REGISTRATION IN MUSIC 346C REQUIRED.

CONF	A	ARR		100A	S H	ZIRNER
LECT-DISC	*B	2	TUWTHF	104	1203 W NEV	RAFFERTY

COURSES FOR GRADUATES

MUSIC 420 SEMINAR IN MUSIC LITERATURE.
PREREQUISITE--CONSENT OF INSTRUCTOR. REQUIRED OF ALL STUDENTS ENROLLED IN THE DOCTORAL MUSICAL ARTS PROGRAM.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

LECT-DISC	A	3-5	TU TH	101	H A	GOLDTHWAITE

MUSIC 427 BEETHOVEN, II.
1/2 OR 1 UNIT

LECT-DISC	A	3-5	M W	101	H A	RINGER

NUCLEAR ENGINEERING

DEPARTMENT OFFICE 264 M E B

NUC E 397 RADIOCHEMISTRY.
SAME AS CHEM. 397.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
ONE ADDITIONAL HOUR TO BE ARRANGED.

LECT	10	MTUWTHF	111	N L	BROWNLEE

NUC E 398 RADIOCHEMISTRY LABORATORY.
SAME AS CHEM. 398.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

CONF	1	TU TH	103	N L	BROWNLEE AND
LAB	2-5	TU TH	20	N L	ASSISTANTS

COURSES FOR GRADUATES

NUC E 451 REACTOR LABORATORY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

LAB	ARR	NUC REACTOR LAB	MILEY

NUC E 454 NUCLEAR ENGINEERING LABORATORY INVESTIGATIONS.
PREREQUISITE--PHYCS. 282 OR 382 AND CONSENT OF INSTRUCTOR.
1/2 TO 1 1/2 UNITS

CONF	ARR	STAFF

NUC E 490 SPECIAL TOPICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
C--REACTOR HEAT TRANSFER

LECT-DISC	8-10	M W F	143B M E B	JONES

NUC E 495 NUCLEAR ENGINEERING PROBLEMS.
PREREQUISITE--AT LEAST THREE UNITS OF GRADUATE WORK AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

CONF	ARR	STAFF

NUC E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

PHILOSOPHY

DEPARTMENT OFFICE 121 L H

MAJOR--TWENTY HOURS FROM ANY COURSES OFFERED BY THE DEPARTMENT, INCLUDING PHIL. 102, 303, 306, 321, AND ONE ADDITIONAL 300 COURSE IN PHILOSOPHY.

MINORS--TWENTY HOURS SELECTED FROM THE COURSES OF ANY ONE OR TWO DEPARTMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES EXCLUDING RHET. 101, 102, AND FIRST-YEAR MODERN LANGUAGE COURSES, OR FROM ANY APPROVED L.A.S. INTERDEPARTMENTAL CURRICULUM, OR FROM ECONOMICS, EDUCATION, HOME ECONOMICS, LAW, OR LIBRARY SCIENCE. IF TWO DEPARTMENTS OR CURRICULA ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH, AND THE COURSES MUST BE APPROVED BY THE DEPARTMENT OF PHILOSOPHY.

COURSES FOR UNDERGRADUATES

FRESHMAN JAMES SCHOLARS ARE AUTOMATICALLY PERMITTED TO TAKE ANY 100 PHILOSOPHY COURSE.

PHIL 101 INTRODUCTION TO PHILOSOPHY.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

LECT-DISC	C	10-12	M	W	F	184	L H
LECT-DISC	F	2-4	M	W	F	113	G H

PHIL 102 LOGIC.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

LECT-DISC	A	8-10	M	W	F	184	L H
LECT-DISC	F	2-4	M	W	F	217	G H

PHIL 105 MORAL IDEAS AND PRACTICE.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
*CREDIT IS NOT GIVEN FOR BOTH PHIL. 105 AND 103.
*2 HOURS

LECT-DISC		1240-2	M	W	F	313	G H

COURSES FOR ADVANCED UNDERGRADUATES

PHIL 201 READING COURSE.
PREREQUISITE--JUNIOR OR SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

CONF	&A	ARR

PHIL 202 THESIS.
PREREQUISITE--SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

CONF	&A	ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOPHOMORE JAMES SCHOLARS WHO HAVE HAD NO PHILOSOPHY COURSES ARE PERMITTED TO TAKE PHILOSOPHY 303, 306, 307, AND 308. THOSE WHO HAVE HAD A PHILOSOPHY COURSE MAY TAKE ANY 300 PHILOSOPHY COURSE.

PHIL 307 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS, OR 1/2 UNIT
LECT-DISC 10 M W F 162 L H

PHIL 308 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS, OR 1/2 UNIT
LECT-DISC 11 M W F 162 L H

PHIL 311 PHILOSOPHIC IDEAS OF THE NINETEENTH AND TWENTIETH CENTURIES.
3 HOURS, OR 3/4 OR 1 UNIT
LECT-DISC 1-3 M W F 327 G H

PHIL 335 SOCIAL PHILOSOPHY.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT
LECT-DISC 1-3 M W F 329 G H

PHIL 337 SEMANTICS.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT
LECT-DISC 1-3 M W F 340 L H

COURSES FOR GRADUATES

PHIL 483 INDIVIDUAL TOPICS.
1/2 OR 1 UNIT, SUMMER--1/2 TO 2 UNITS
CONF ARR

PHIL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR

PHYSICAL EDUCATION FOR MEN

MEN ENTERING THE UNIVERSITY WITH LESS THAN SIXTY SEMESTER HOURS OF CREDIT--EXCEPT VETERANS WHO RECEIVE CREDIT BECAUSE OF MILITARY SERVICE, BUT WHO MAY ELECT TO TAKE PHYSICAL EDUCATION--ARE REQUIRED TO OBTAIN CREDIT FOR FOUR SEMESTERS OF PHYSICAL EDUCATION, INCLUDING THE AMOUNT TRANSFERRED. CREDIT MAY BE OBTAINED BY PASSING COURSES LISTED BELOW OR BY PASSING PROFICIENCY EXAMINATIONS WHICH ARE OFFERED AT TIMES SPECIFIED BY THE DEPARTMENT. PERMITS FOR TAKING PROFICIENCY EXAMINATIONS MUST BE SECURED IN ROOM 201 MENS OLD GYMNASIUM NOT LATER THAN 48 HOURS PRECEDING EACH EXAMINATION. STUDENTS ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS IN COURSES IN WHICH THEY ARE CURRENTLY REGISTERED. STUDENTS ENROLLED IN PRESCRIBED EXERCISE ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS WITHOUT SPECIAL WRITTEN PERMISSION FROM THE COORDINATOR OF PRESCRIBED EXERCISE.

OFFICE FOR BASIC INSTRUCTION COURSES--201 MENS OLD GYMNASIUM.

OFFICE FOR PROFESSIONAL COURSES--120 HUFF GYMNASIUM.

BASIC-INSTRUCTION COURSES FOR UNDERGRADUATES

P E M 132 ARCHERY.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 3-5 M W ARCHERY RANGE HOTTINGER
NOTE--FIRST CLASS MEETING IN EAST BALCONY, MENS OLD GYM ANNEX.

P E M 135 TENNIS.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 1-3 TU TH GREGORY CTS SLONIGER
NOTE--FIRST CLASS MEETING WILL BE HELD IN NORTH BALCONY, HUFF GYM.

P E M 137 BOWLING.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 1-3 M W 40 IU ALLEYS LEIGH

P E M 138 GOLF.
1 HOUR
THESE CLASSES MEET TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 10-12 TU TH FLD C H G KELLER
NOTE--FIRST CLASS MEETING WILL BE HELD IN WEST BALCONY, HUFF GYM.

P E M 140 CANOEING AND SMALL CRAFT OPERATION.
PREREQUISITE--ABILITY TO SWIM REASONABLY WELL 25 YARDS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
LAB 3-5 TU TH CRYSTAL LAKE LEAS

P E M 142 BALLROOM DANCE.
SAME AS P.E.W. 142.
1 HOUR
LAB 7-9 M W 310 W GYM PHIPPS

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E M 213 ADVANCED FOOTBALL.
PREREQUISITE--P.E.M. 152.
1 HOUR
LAST FOUR WEEKS OF SUMMER SESSION.
LECT-DISC 7 MTUWTH 209 H G TATE

P E M 214 ADVANCED BASKETBALL.
PREREQUISITE--P.E.M. 151.
1 HOUR
FIRST FOUR WEEKS OF SUMMER SESSION.
LECT-DISC 7 MTUWTH 209 H G BRAUN

P E M 217 THEORY OF COACHING.
PREREQUISITE--P.E.M. 213 AND P.E.M. 214, OR CONSENT OF INSTRUCTOR.
2 HOURS
LECT-DISC 8 MTUWTH 211 H G FLETCHER

PHYSICAL EDUCATION

DEPARTMENT OFFICE 120 HUFF GYM

COURSES FOR GRADUATES

P E 401 PROBLEMS IN PHYSICAL EDUCATION.
1 UNIT
LECT-DISC 8 MTUWTH 207A H G JACKSON

P E 406 PHILOSOPHY OF SPORT.
1 UNIT
LECT-DISC 10 MTUWTH 207A H G ULRICH

P E 407 SPORT PSYCHOLOGY.
PREREQUISITE--PSYCH. 100, ED. PSY. 211, CONSENT OF INSTRUCTOR.
1 UNIT

LECT-DISC	9	MTUWTH	301	H G	HUBBARD

P E 408 PRINCIPLES OF KINESIOTHERAPY.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, AND PHYSIOLOGY OF EXERCISE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*SIX ADDITIONAL HOURS IN EXERCISE THERAPY CLINIC 3-6 MWF AFTERNOON

LECT-DISC	*8	MTUWTH	106	MOG ANNEX	SHELTON

P E 451 SCIENTIFIC FOUNDATIONS OF PHYSICAL FITNESS.
PREREQUISITE--UNDERGRADUATE ANATOMY AND PHYSIOLOGY, TESTS AND MEASUREMENTS.
1 UNIT
*FOUR ADDITIONAL HOURS TO BE ARRANGED.

LECT-DISC	*10	MTUWTH	209	H G	CURETON

P E 452 SCIENTIFIC ANALYSIS OF PHYSICAL EDUCATION ACTIVITIES.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, ELEMENTARY PHYSICS, ALGEBRA AND TRIGONOMETRY, OR CONSENT OF INSTRUCTOR.
1 UNIT
*TWO ADDITIONAL HOURS 2-4 WEDNESDAY OR ARRANGE.

LECT-DISC	*11	MTUWTH	209	H G	ULRICH

P E 490 SEMINAR.
NO CREDIT

LECT-DISC	7-9PM	TU TH	209	H G	CURETON, ZEIGLER

P E 493 SPECIAL PROJECTS.
PREREQUISITE--DOCTORAL CANDIDATE.
1/2 OR 1 UNIT

CONF	ARR	STAFF

P E 495 TECHNIQUES OF RESEARCH IN HEALTH, PHYSICAL EDUCATION, AND
495 RECREATION.
1 UNIT
*FOUR ADDITIONAL HOURS IN LAB. SESSION BY APPOINTMENT.

LECT-DISC	*11	MTUWTH	301	H G	HUBBARD

P E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

PHYSICAL EDUCATION FOR WOMEN

DEPARTMENT OFFICE 117 W GYM

FRESHMEN AND SOPHOMORES--OF THE FOUR SEMESTERS REQUIRED IN PHYSICAL EDUCATION, THE DEPARTMENT RECOMMENDS ONE SEMESTER OF BASIC MOVEMENT-P E W 103, ONE SEMESTER OF SWIMMING--P E W 110 OR 111, ONE SEMESTER OF A TEAM SPORT--P.E.W. 120, 121, 122, 123, 124, OR MODERN DANCE, P.E.W. 104, OR MODERN GYMNASTICS, P.E.W. 107, AND ONE SEMESTER OF AN ELECTIVE--P.E.W. 106, 112, 113, 114, 115, 117, 130, 131, 132, 133, 134, 135, 136, 140, 142, 143, 144, 145, OR OTHER COURSE NOT PREVIOUSLY TAKEN.

SERVICE COURSES FOR UNDERGRADUATES

P E W 107 MODERN GYMNASTICS.
PREREQUISITE--P.E.W. 103 OR EQUIVALENT.
1 HOUR
*SECTION O MEETS FOR FORTY-FIVE MINUTES TWICE A WEEK. REGISTRATION IS LIMITED TO STUDENTS WITH FREE PERIOD FOLLOWING THE CLASS.
*SECTION M MEETS ON THE HOUR FOR FORTY-FIVE MINUTES AND IS DISMISSED FIFTEEN MINUTES BEFORE THE FOLLOWING HOUR.

LAB	A	8	MTUWTH	311	W GYM	HOYMAN

P E W 110 ELEMENTARY SWIMMING.
1 HOUR

LAB	F	1	MTUWTH	116	E B POOL	HARRIS

P E W 111 SUB-INTERMEDIATE SWIMMING.
1 HOUR

LAB	G	2	MTUWTH	116	E B POOL	CULLEN
LAB	H	3	MTUWTH	116	E B POOL	PHIPPS

P E W 112 INTERMEDIATE SWIMMING.
1 HOUR

LAB	G	2	MTUWTH	116	E B POOL	CULLEN
LAB	H	3	MTUWTH	116	E B POOL	PHIPPS

P E W 130 BADMINTON.
1 HOUR
REGISTRATION IS LIMITED TO STUDENTS WITH FREE PERIOD FOLLOWING THE CLASS.

LAB	C	10	MTUWTH	310	W GYM	ALY

P E W 131 GOLF.
1 HOUR

LAB	D	11-1	M W	11	W GYM	CULLEN

P E W 136 TENNIS.
1 HOUR

LAB	B	9	MTUWTH	310	W GYM	ALY

P E W 142 BALLROOM DANCE.
SAME AS P.E.M. 142.
1 HOUR

LAB	L	7-9PM	M W	310	W GYM	PHIPPS

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E W 220 PHYSICAL EDUCATION FOR THE CLASSROOM TEACHER.
SAME AS P.E.M. 220.
PREREQUISITE--JUNIOR STANDING, NON-PHYSICAL EDUCATION MAJOR.
2 HOURS

LAB-DISC	A	8	MTUWTHF	129	W GYM	DROM

DEPARTMENT OFFICE 211 P B

ENGINEERING PHYSICS CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.CURRICULUM IN PHYSICS--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.GENERAL CURRICULUM MAJCR--TWENTY HOURS IN PHYSICS, INCLUDING PHYSICS 321, 341, AND 342, AND EXCLUDING COURSES WITH NUMBERS LOWER THAN 270.

L.A.S.GENERAL CURRICULUM MINCRS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH NOT LESS THAN EIGHT HCURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, CHEMISTRY, EDUCATION, GEOLOGY, MATHEMATICS, ZOOLOGY OR ANY ONE BRANCH OF ENGINEERING.

PHYSICS 101 AND 102 ARE RECOMMENDED TO PREMEDICAL, PREDENTAL, ARCHITECTURE, AND OTHER STUDENTS NOT SPECIALIZING IN PHYSICS, MATHEMATICS, CHEMISTRY OR ENGINEERING.

THE CALCULUS PREREQUISITE FOR CERTAIN COURSES MAY BE SATISFIED EITHER BY MATH. 132 AND 142, OR MATH. 133 ANC 143.

COURSES FOR UNDERGRADUATES

PHYCS 106 GENERAL PHYSICS--MECHANICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--MATH. 122, 123--CREDIT OR REGISTRATION IN MATH, 132 OR 133.
4 HOURS

LECT		10	MTUWTH	141	P B
QUIZ	A	1-3	TU TH	232	P B
LAB	A	1-3	M W	232	P B
QUIZ	B	3-5	TU TH	232	P B
LAB	B	3-5	M W	232	P B

PHYCS 107 GENERAL PHYSICS--HEAT, ELECTRICITY, AND MAGNETISM.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 106, CREDIT OR REGISTRATION IN MATH. 142 OR 143.
4 HOURS
*FOR JAMES SCHOLARS AND OTHER HONOR STUDENTS.

LECT	11	MTUWTH	151	P B
QUIZ	2-4	TU TH	234	P B
LAB	2-4	M W	234	P B

PHYCS 108 GENERAL PHYSICS--WAVE MCTION, SOUND, LIGHT, AND MODERN PHYSICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATICN IN MATH. 142 OR 143
4 HOURS
*FOR JAMES SCHOLARS AND OTHER HONOR STUDENTS.

LECT	8	TUWTHF	151	P B
QUIZ	1-3	TU TH	236	P B
LAB	1-3	W F	236	P B

COURSES FOR GRADUATES

PHYCS 497 INDIVIDUAL STUDY.
1/2 OR 1 UNIT

CONF	ARR	STAFF

PHYCS 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

CONF	ARR	STAFF

PHYSIOLOGY

DEPARTMENT OFFICE 524 BURRILL HALL

MAJOR--THE MAJOR CONSISTS OF TWENTY HOURS IN ANIMAL PHYSIOLOGY OR CLOSELY RELATED SUBJECTS LISTED IN THE LAST SENTENCE BELOW, NOT INCLUDING ELEMENTARY COURSES, AND INCLUDING PHYSL. 301, GENERAL PHYSIOLOGY, AND PHYSL. 302, EXPERIMENTAL ANIMAL PHYSIOLOGY. BECAUSE PHYSIOLOGY REQUIRES AN UNDERSTANDING OF PHYSICAL AND BIOLOGICAL SCIENCE, THE STUDENTS PROGRAM MUST INCLUDE A YEAR OF GENERAL BIOLOGY, INCLUDING BOTH ANIMAL AND PLANT BIOLOGY--A SEMESTER OF GENETICS--MATHEMATICS THROUGH ELEMENTARY CALCULUS--TWO SEMESTERS OF PHYSICS--AND FOUR SEMESTERS OF CHEMISTRY INCLUDING GENERAL, INORGANIC, ORGANIC AND QUANTITATIVE CHEMISTRY. MICROBIOLOGY, EMBRYOLOGY, HISTOLOGY, PHYSICAL CHEMISTRY AND BIOCHEMISTRY ARE RECOMMENDED STRONGLY. WITH THE APPROVAL OF THE ADVISER, UPPER DIVISION COURSES IN GENETICS, BIOCHEMISTRY, BIOPHYSICS, AND PLANT PHYSIOLOGY MAY BE COUNTED TOWARD THE MAJOR.

MINOR--TWENTY HOURS MAY BE CHOSEN FROM PHYSICS, CHEMISTRY, MICROBIOLOGY OR ZOOLOGY, PROVIDED AT LEAST EIGHT SEMESTER HOURS ARE OFFERED IN THE LESSER, IF TWO MINORS ARE CHOSEN.

HONORS--STUDENTS WORKING TOWARD DEPARTMENTAL DISTINCTION MUST ENROLL IN PHYSL. 290 READING COURSE, WORK WITH AN ADVISER FOR AT LEAST TWO SEMESTERS, AND TAKE A GENERAL EXAMINATION IN THE LAST SEMESTER OF THE SENIOR YEAR.

COURSES FOR UNDERGRADUATES

PHYSL 103 INTRODUCTION TO HUMAN PHYSIOLOGY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT		1	MTUWTH	140	BUR HALL	STOLPE
LAB	1	2-4	M W	434	BUR HALL	
DISC	1	2-4	TU TH	436	BUR HALL	
LAB	2	2-4	TU TH	434	BUR HALL	
DISC	2	2-4	M W	436	BUR HALL	
LAB	3	2-4	M W	413	BUR HALL	
DISC	3	2-4	TU TH	444	BUR HALL	
LAB	4	2-4	TU TH	413	BUR HALL	
DISC	4	2-4	M W	444	BUR HALL	

COURSES FOR ADVANCED UNDERGRADUATES

PHYSL 290 READING COURSE.
PREREQUISITE--A COURSE IN PHYSIOLOGY, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

CONF	ARR		STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PHYSL 301 GENERAL PHYSIOLOGY.
SAME AS ZOOL. 301.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS, AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHF	140	BUR HALL	ANDERSON
LAB	9-12	MTU	523	BUR HALL	
LAB	10-12	W	523	BUR HALL	
DISC	9	W	523	BUR HALL	

COURSES FOR GRADUATES

PHYSL 491 INDIVIDUAL TOPICS.
PREREQUISITE--APPROVAL OF DEPARTMENT.
1/2 TO 2 UNITS
CONF ARR STAFF

PHYSL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

PLANT PATHOLOGY

DEPARTMENT OFFICE 218 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PL PA 300 SPECIAL PROBLEMS.
UNDERGRADUATE PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
*MAXIMUM CREDIT EIGHT HOURS OR TWO UNITS.
*2 TO 4 HOURS, OR 1/4 TO 1 UNIT
BEVER, BLACK, BRITTON, CARTER, CHAMBERLAIN, GERDEMANN, GOTTLIEB, HOOKER, LINN, POWELL, SHAW, SHURTLEFF, THORNBERRY TAYLOR
CONF ARR

COURSES FOR GRADUATES

PL PA 499 THESIS RESEARCH.
PREREQUISITE--PL. PA. 301 AND 302 OR EQUIVALENT.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
BEVER, BLACK, CARTER, CHAMBERLAIN, GERDEMANN, GOTTLIEB, HOOKER, LINN, POWELL, SHAW, TAYLOR THORNBERRY
CONF ARR

POLITICAL SCIENCE

DEPARTMENT OFFICE 325 L H

MAJOR--TWENTY HOURS FROM COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE. A MAJOR MAY INCLUDE THREE SEMESTER HOURS FROM THE FOLLOWING COURSES--ECONOMICS 170, 171--STATISTICS--, ECONOMICS 214--PUBLIC FINANCE--, HISTORY 345, 346, 369, 370--CONSTITUTIONAL HISTORY--, MATHEMATICS 161--STATISTICS--, PSYCHOLOGY 135--STATISTICS AND SOCIOLOGY 185--STATISTICS--. NO STUDENT ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1961, MAY OFFER MORE THAN EIGHT HOURS OF 100 LEVEL COURSES AS PART OF A POLITICAL SCIENCE MAJOR.

MINOR--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, EDUCATION, FINANCE, GEOGRAPHY, HISTORY, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PSYCHOLOGY, SOCIAL WORK, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN-AMERICAN STUDIES RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR.

POL. SCI. 150 AND 151 GIVE A GENERAL SURVEY OF NATIONAL, STATE, AND LOCAL GOVERNMENT IN THE UNITED STATES. POL. SCI. 191 AND 192 PRESENT A SURVEY OF THE BASIC CONCEPTS AND METHODS OF POLITICAL SCIENCE AND SIGNIFICANT CURRENT GOVERNMENTAL AND POLITICAL PROBLEMS AND POLICIES. UNDERGRADUATES BEGINNING THE STUDY OF POLITICAL SCIENCE ARE ADVISED TO TAKE, FIRST, EITHER POL. SCI. 150 OR 191. STUDENTS PLANNING TO DO ADVANCED WORK SHOULD, DURING THE SOPHOMORE YEAR, TAKE EITHER POL. SCI. 150 OR 191 AND FOLLOW IT WITH SUCH OTHER COURSES AS WILL COMPLETE ONE OF THE FOLLOWING COMBINATIONS--150 AND 151, 150 AND 192, OR 191 AND 192.

COURSES FOR UNDERGRADUATES

POL S 150 AMERICAN GOVERNMENT--ORGANIZATION AND POWERS.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH POL. S. 150 AND 191.
*3 HOURS
*FOR JAMES SCHOLARS AND OTHER STUDENTS HAVING A GRADE AVERAGE OF 4.0 OR ABOVE.

LECT-DISC	A	10	MTUWTHF	192	L	H	FEDDER
	A	3	M	192	L	H	FEDDER
LECT-DISC	B	11	MTUWTHF	310	L	H	WOOD
	B	3	W	310	L	H	WOOD

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

POL S 336 GOVERNMENTS AND POLITICS IN WESTERN CONTINENTAL EUROPE
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	8-10	M W F	192	L	H	WOOD

POL S 396 CONTEMPORARY POLITICAL THEORY.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	11	MTUWTHF	192	L	H	HALLOWELL
	3	TU	192	L	H	HALLOWELL

COURSES FOR GRADUATES

POL S 400 CLASSICS OF POLITICAL SCIENCE.
1 UNIT

LECT-DISC	2-4	M W	111	G	H	HALLOWELL

POL S 450 CONTEMPORARY GOVERNMENTAL PROBLEMS.
*STUDENTS MAY ACCUMULATE THREE UNITS.
*1 UNIT

LECT-DISC	2-4	TU TH	217	G	H	FEDDER

POL S 493 RESEARCH IN SELECTED TOPICS.
1 UNIT

LECT-DISC	ARR	STAFF

POL S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

LECT-DISC	ARR	STAFF

PORTUGUESE

DEPARTMENT OFFICE 224 L H

COURSES FOR GRADUATES

PORT 491 SPECIAL TOPICS IN PORTUGUESE.
1/2 OR 1 UNIT
CONF ARR SHOEMAKER, KAHANE

PORT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
CONF ARR SHOEMAKER, KAHANE

PSYCHOLOGY

DEPARTMENT OFFICE 316 G H

MAJOR--TWENTY HOURS IN PSYCHOLOGY, EXCLUDING PSYCH. 100 AND 103, AND D.G.S. 171. TWO TYPES OF MAJOR PROGRAMS ARE OFFERED--THE GENERAL MAJOR, SUITABLE FOR STUDENTS INTERESTED PRIMARILY IN GENERAL LIBERAL EDUCATION, AND THE HONORS MAJOR, DESIGNED MAINLY TO PREPARE STUDENTS FOR GRADUATE STUDY IN PSYCHOLOGY.

GENERAL MAJOR--IN THIS PROGRAM THERE ARE NO PRESCRIBED COURSES.

HONORS MAJOR--THIS PROGRAM MUST INCLUDE PSYCHOLOGY 135, 290, AND TWO OF THE FOLLOWING COURSES--PSYCH. 330, 331, 345, 360, WITH THE CONSENT OF THE MAJOR ADVISOR, THE EQUIVALENT OF ANY OF THESE COURSES MAY BE SUBSTITUTED. THE HONORS MAJOR IS STRONGLY URGED TO TAKE--A - WORK IN H SECTIONS, WHEN AVAILABLE, AND IN ADVANCED COURSES IN PSYCHOLOGY, B - MATHEMATICS THROUGH CALCULUS, C - AT LEAST A FULL YEAR LABORATORY COURSE IN ANOTHER SCIENCE, D - AT LEAST TWO YEARS OF FRENCH, GERMAN, OR RUSSIAN, WITH TWO YEARS IN EACH OF TWO OF THESE BEING HIGHLY DESIRABLE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, CHEMISTRY, ECONOMICS, EDUCATION, HISTORY, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PHYSICS, PHYSIOLOGY, POLITICAL SCIENCE, SOCIAL WORK, SOCIOLOGY, SPEECH, AND ZOOLOGY.

DEPARTMENTAL DISTINCTION--THE MINIMUM REQUIREMENTS FOR GRADUATION WITH DEPARTMENTAL DISTINCTION IN PSYCHOLOGY ARE AS FOLLOWS--A - ELIGIBILITY FOR COLLEGE HONORS, B - SATISFACTORY COMPLETION OF THE COURSES REQUIRED IN THE HONORS MAJOR PROGRAM, C - FOUR HOURS OF CREDIT IN PSYCHOLOGY 291-292, INCLUDING AN ACCEPTABLE THESIS.

COURSES FOR UNDERGRADUATES

PSYCH 100 INTRODUCTION TO PSYCHOLOGY.
NOT OPEN TO STUDENTS ELECTING PSYCH. 103 OR D.G.S. 171.
REQUIRES FIVE HOURS OF PARTICIPATION IN LABORATORY EXPERIMENTS
4 HOURS
*STUDENTS IN LECT. A MUST ELECT A QUIZ SECTION A, IN LECT. B, A QUIZ SECTION B, ETC.

LECT	A	8	MTUWTHFS	100	G	H	MCALLISTER
QUIZ	A1	9	TU TH	313	G	H	
QUIZ	A2	10	TU TH	313	G	H	
QUIZ	A3	11	M W	313	G	H	
LECT	B	10	MTUWTHFS	100	G	H	MCALLISTER
QUIZ	B1	8	TU TH	313	G	H	
QUIZ	B2	9	M W	313	G	H	
QUIZ	B3	11	TU TH	313	G	H	

COURSES FOR ADVANCED UNDERGRADUATES

PSYCH 216 CHILD PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
3 HOURS

LECT	9	MTUWTHFS	315	G	H	SHANNON

PSYCH 250 PSYCHOLOGY OF PERSONALITY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 150 AND 250.
*3 HOURS

LECT	11	MTUWTHFS	315	G	H	BERNSTEIN

PSYCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE-POINT AVERAGE OF 4.0, AND WRITTEN CONSENT OF THE INSTRUCTOR--IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

CONF	ARR					STAFF

PSYCH 294 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE-POINT AVERAGE OF 4.0, AND WRITTEN CONSENT OF THE INSTRUCTOR, IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

CONF	ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PSYCH 326 MOTIVATION AND EMOTION.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

LECT	1-3	TUWTH	317	G	H	COHEN

PSYCH 338 ABNORMAL PSYCHOLOGY.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY, JUNIOR STANDING EXCEPT FOR THOSE IN THE PREMEDICAL CURRICULUM WHO MAY TAKE THE COURSE AS SECOND SEMESTER SOPHOMORES WITH FOUR HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

LECT	10-12	TUWTH	317	G	H	COHEN

PSYCH 348 THE PSYCHOLOGY OF LEARNING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

LECT	8-10	TUWTH	317	G	H	FRANKMANN

COURSES FOR GRADUATES

NOTE--THE PREREQUISITES STATED APPLY TO GRADUATE MAJORS IN PSYCHOLOGY. STUDENTS MINORING IN PSYCHOLOGY MAY, BY SPECIAL PERMISSION OF INSTRUCTORS, ENROLL IN CERTAIN OF THESE COURSES WITHOUT HAVING MET ALL OF THE PREREQUISITES.

PSYCH 441 PERSONALITY AND BEHAVIOR DYNAMICS.
PREREQUISITE--TWELVE HOURS OF PSYCHOLOGY.
1/2 UNIT
LECT 1-3 TU TH 445 G H SHANNON

PSYCH 490 INDIVIDUAL RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
LECT ARR STAFF

PSYCH 493 SEMINAR.
PREREQUISITE--SIX UNITS OF GRADUATE CREDIT IN PSYCHOLOGY--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
LECT 1-3 M W 445 G H COSTIN

PSYCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
SECTION A IS FOR M.A. THESIS, SECTION B IS FOR PH. D. THESIS.
LECT ARR STAFF

RADIO AND TELEVISION

DEPARTMENT OFFICE 44 G H

COURSES FOR ADVANCED UNDERGRADUATES

R TV 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS
CONF ARR LIPPOLD

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R TV 366 ADVANCED RADIO AND TELEVISION PRACTICES, I.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
CONF ARR LIPPOLD

R TV 367 ADVANCED RADIO AND TELEVISION PRACTICES, II.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
CONF ARR LIPPOLD

COURSES FOR GRADUATES

R TV 450 SPECIAL PROBLEMS IN TELEVISION.
PREREQUISITE--A TELEVISION COURSE IN THE AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 UNITS
*1 OR 2 UNITS
CONF ARR STAFF

R TV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN RADIO AND TELEVISION.
1 OR 2 UNITS
CONF ARR STAFF

RECREATION AND MUNICIPAL PARK ADMINISTRATION

DEPARTMENT OFFICE 203 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

REC 278 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
CONF ARR SAPORA, PARKER

REC 279 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
CONF ARR SAPORA, PARKER

COURSES FOR GRADUATES

REC 401 FOUNDATIONS OF RECREATION.
PREREQUISITE--REC. 176 OR EQUIVALENT.
1 UNIT
LECT-DISC N 10-12 M 207 F A B BRIGHTBILL

REC 490 SEMINAR.
NO CREDIT
LECT-DISC 10-12 TU TH 207 F A B BRIGHTBILL

REC 493 SPECIAL PROJECTS.
PREREQUISITE--REC. 403 OR EQUIVALENT, RECREATION MAJOR.
1/2 TO 2 UNITS, SUMMER--1/2 OR 1 UNIT
CONF ARR BRIGHTBILL

REC 499 THESIS RESEARCH.
1/2 TO 2 UNITS
CONF ARR BRIGHTBILL

RHETORIC

INCLUDING RHETORIC AND COMPOSITION, ENGLISH
FOR FOREIGN STUDENTS, AND BUSINESS ENGLISH

RHETORIC AND COMPOSITION

DEPARTMENT OFFICE 109 E B

MAJOR--TWENTY HOURS IN ENGLISH EXCLUDING RHET. 101, 102, 107, 108, 151, 200, 271, 272, ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND INCLUDING TEN HOURS OF ENGLISH OR AMERICAN LITERATURE, AT LEAST SIX OF WHICH MUST BE CHOSEN FROM THE ADVANCED GROUPS, AND TEN HOURS IN COMPOSITION CHOSEN FROM RHET. 143, 144, 205 206, 227, 246, 255, 256, 263, 330 AND INCLUDING AT LEAST ONE COURSE IN EXPOSITORY WRITING. WITH THE PERMISSION OF THE ADVISER, ONE OF THE FOLLOWING COURSES MAY BE COUNTED TOWARD A COMPOSITION MAJOR--SPEECH 363, JOURN. 266, 326.
STUDENTS WHO PLAN TO ENTER GRADUATE COLLEGE MUST SATISFY THE REQUIREMENTS OF TWENTY HOURS OF COURSES IN ENGLISH AND AMERICAN LITERATURE.

MINOR--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC--NOT INCLUDING APPLIED MUSIC--COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE HEAD OF THE DEPARTMENT, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJOR OF THEIR DEPARTMENT EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

DEPARTMENTAL DISTINCTION--A STUDENT MAJORING IN RHETORIC AND COMPOSITION WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT--4.0 OR HIGHER--MAY EARN DISTINCTION ONLY BY OFFERING SIX HOURS OF WORK IN ADDITION TO THE MINIMUM NUMBER OF HOURS REQUIRED FOR THE MAJOR. THIS ADDITIONAL CREDIT MUST INVOLVE A SIGNIFICANT WRITING PROJECT IN RHET. 255 AND THE COMPLETION OF EITHER ENGL. 297 OR ENGL. 298. THE LEVEL OF DISTINCTION--DISTINCTION, HIGH DISTINCTION, HIGHEST DISTINCTION--IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THESE COURSES AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE-POINT AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR, TO RECEIVE HIGHEST DISTINCTION, HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF IN THE OPINION OF HIS INSTRUCTORS AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

COURSES FOR UNDERGRADUATES

RHET 101 FRESHMAN RHETORIC AND COMPOSITION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A1	8	MTUWTHF	110	E B	LAMAR
	A1	2	W	110	E B	
LECT-DISC	B1	9	MTUWTHF	209	E B	
	B1	2	TU	110	E B	
LECT-DISC	C1	10	MTUWTHFS	110	E B	
LECT-DISC	D1	11	MTUWTHFS	110	E B	

RHET 102 FRESHMAN RHETORIC AND COMPOSITION.
PREREQUISITE--RHET. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	B	9	MTUWTHFS	110	E B	LAMAR

RHET 144 NARRATIVE WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT, SOPHOMORE STANDING.
3 HOURS

LECT-DISC	B	9	MTUWTHF	210A	E B	FUMENTO
		12	M	210A	E B	

COURSES FOR ADVANCED UNDERGRADUATES

RHET 200 REMEDIAL WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH.
NO CREDIT

LECT-DISC	A1	8	MTUWTHFS	205	E B	
LECT-DISC	A2	8	MTUWTHFS	209	E B	
LECT-DISC	B	9	MTUWTHFS	210B	E B	
LECT-DISC	C	10	MTUWTHFS	210B	E B	
LECT-DISC	D	11	MTUWTHFS	210B	E B	

RHET 255 CREATIVE WRITING.
PREREQUISITE--A PREPARATORY COURSE IN ADVANCED WRITING--RHET. 205, 206, 227, 330, SPCH. 263, 363, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS

CONF		ARR				FUMENTO

ENGLISH FOR FOREIGN STUDENTS

DEPARTMENT OFFICE 317 E B

NOTE--NO STUDENT IS PERMITTED TO REGISTER FOR ANY COURSE IN ENGLISH AS A FOREIGN LANGUAGE UNTIL HE HAS TAKEN THE EXAMINATION IN ENGLISH FOR FOREIGN STUDENTS. AUDITORS ARE NOT PERMITTED. RHETORIC 114 AND 115 FULFILL GRADUATION REQUIREMENTS IN RHETORIC. STUDENTS MAY BE REQUIRED TO TAKE MORE ELEMENTARY COURSES BEFORE THEY ARE PERMITTED TO TAKE RHET. 114. ADVISERS SHOULD CONSULT THE UNDERGRADUATE STUDY BULLETIN UNDER THE SECTION ENTITLED--GENERAL REQUIREMENTS FOR GRADUATION-ENGLISH--FOR THE DEFINITION OF A FOREIGN STUDENT.

COURSES FOR UNDERGRADUATES

RHET 110 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS, RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*MAY ALSO BE TAKEN WITH RHET. 111 AND 114.
*NO CREDIT

LECT-DISC	C	10	MTUWTHFS	210A	E B	KEEN

RHET 111 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--RHET. 109, RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
NO CREDIT

LECT-DISC	A	8-10	MTUWTHFS	119	E B	ENATA

RHET 114 ENGLISH AS A FOREIGN LANGUAGE, I.
NOT OPEN TO GRADUATE STUDENTS.
PREREQUISITE--RHET. 111, RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

LECT-DISC	D	11	MTUWTHFS	119	E B	HUSSEY

RHET 115 ENGLISH AS A FOREIGN LANGUAGE, II.
NOT OPEN TO GRADUATE STUDENTS.
PREREQUISITE--RHET. 114 AND/OR RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

LECT-DISC	C	10	MTUWTHFS	119	E B	HUSSEY

COURSES FOR GRADUATES

RHET 400 ENGLISH AS A FOREIGN LANGUAGE FOR GRADUATE FOREIGN STUDENTS.
PREREQUISITE--GRADUATE STANDING AND RHET. 111, OR CONSENT OF INSTRUCTOR.
3 HOURS, NO GRADUATE CREDIT.

LECT-DISC	E	1-3	M W F	119	E B	KEEN

BUSINESS ENGLISH

DEPARTMENT OFFICE 101 D K H

COURSES FOR UNDERGRADUATES

RHET 151 BUSINESS LETTER WRITING.
PREREQUISITE--RHET. 101 AND 102.
3 HOURS

LECT-DISC	B	9	MTUWTHF	326	D K H	ZEWADSKI
	B	2	TU	326	D K H	ZEWADSKI
LECT-DISC	C	10	MTUWTHF	106	D K H	MAGUIRE
	C	2	TU	106	D K H	MAGUIRE

COURSES FOR ADVANCED UNDERGRADUATES

RHET 272 REPORT WRITING.
PREREQUISITE--RHET. 101, 102, AND 151, OR CONSENT OF CHAIRMAN OF DIVISION.
2 HOURS

LECT-DISC	B	9	MTUWTH	106	D K H	FELTON
LECT-DISC	C	10	MTUWTH	326	D K H	CHAPDU

RURAL SOCIOLOGY

SEE AGRICULTURAL ECONOMICS

RUSSIAN

DEPARTMENT OFFICE 237 L H

MAJOR--TWENTY HOURS OF RUSSIAN EXCLUDING RUSSIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, A MINIMUM OF THREE HOURS IN RUSSIAN 321, 322, 323, 324, 325, AND 332, AND A MINIMUM OF TWO AND A MAXIMUM OF SIX HOURS IN RUSSIAN 309, 310, 312, 331.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH--EXCLUDING RHET. 101 AND 102--, FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GER. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT SUBJECT. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES--WITH THE EXCEPTION OF COURSES IN RUSSIAN--IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

RUSS 101 FIRST-YEAR RUSSIAN, I.
FOR STUDENTS WHO HAVE NO CREDIT IN RUSSIAN.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR RUSS. 101 WITHOUT RUSS. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	A	8-10	MTUWTH	429	ARMORY	

RUSS 102 FIRST-YEAR RUSSIAN, II.
PREREQUISITE--RUSS. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	G	3-5	MTUWTH	1	G H	

RUSS 103 SECOND-YEAR RUSSIAN, I.
PREREQUISITE--RUSS. 102 OR EQUIVALENT.
4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

LECT-DISC	A	8-10	MTUWTH	1	G H	KLEIN

COURSES FOR ADVANCED UNDERGRADUATES

RUSS 211 ORAL RUSSIAN, I.
PREREQUISITE--RUSS. 103 AND 104 OR CONSENT OF INSTRUCTOR.
2 HOURS
LECT-DISC D 11 MTUWTH 1 G H USZYNSKI

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RUSS 324 READINGS IN RUSSIAN LITERATURE--CHEKHOV, GORKY, BLOC.
PREREQUISITE--RUSS. 201 AND 202 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
LECT-DISC E 1-3 M W F 1 G H USZYNSKI

RUSS 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., GER., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT
LECT-DISC 10 MTU THF 216 L H NACHTMANN

COURSES FOR GRADUATES

RUSS 400 BEGINNING RUSSIAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.
LECT-DISC G 3-5 MTUWTH 429 ARMORY

RUSS 401 READINGS IN RUSSIAN FOR GRADUATE STUDENTS.
PREREQUISITE--RUSS. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
LECT-DISC A 8-10 MTUWTH 270 L H BILOKUR
LECT-DISC E 1-3 MTUWTH 429 ARMORY BILOKUR

RUSS 416 STUDIES IN RUSSIAN CRITICISM.
PREREQUISITE--RUSS. 322, 324.
1 UNIT
LECT-DISC C 10 MTUWTH 1 G H TERRAS

CONF ARR STAFF

RUSS 700 491 INDIVIDUAL TOPICS
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN RUSSIAN
1/4 TO 2 UNITS

SAFETY EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

S ED 294 ADVANCED TRAFFIC SAFETY EDUCATION.
PREREQUISITE--S. ED. 284 OR CONSENT OF INSTRUCTOR
2 HOURS
OTHER HOURS TO BE ARRANGED.
LECT-DISC 9 MTUWTH 209 H G HUFFMAN

SOCIOLOGY

DEPARTMENT OFFICE 342 L H

MAJOR--TWENTY HOURS FROM ANY COURSES IN SOCIOLOGY, EXCLUDING SOCIOL. 100, 104, AND 105. SOCIOLOGY MAJORS ARE STRONGLY ADVISED TO TAKE AT LEAST ONE COURSE IN EACH OF THE FOLLOWING FIELDS--GENERAL SOCIOLOGICAL THEORY--SOC. 221--SOCIETY AND THE INDIVIDUAL--SOC. 212 AND 320--AND SOCIOLOGICAL RESEARCH METHODS--SOC. 385 AND 386. SOC. 185, OR AN EQUIVALENT, IS REQUIRED FOR SOCIOLOGY MAJORS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIAL WORK. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.

DEPARTMENTAL DISTINCTION--IN ORDER TO BE AWARDED DISTINCTION IN SOCIOLOGY AT GRADUATION, THE STUDENT MUST 1 -HAVE AT LEAST A 4.0 ALL UNIVERSITY GRADE POINT AVERAGE, 2 - MEET THE GENERAL REQUIREMENTS FOR A MAJOR IN SOCIOLOGY, AND , 3-IN ADDITION TO THE WORK DONE FOR THE MAJOR EARN FOUR SEMESTER HOURS OF CREDIT BY ENROLLING IN ONE OR BOTH OF THE HONORS COURSES--SOC. 290-291.

COURSES FOR ADVANCED UNDERGRADUATES

SOC 221 CONTEMPORARY SOCIETY.
PREREQUISITE--SOC. 100, OR 104, AND 105, OR D.G.S. 151 AND 152--SOC. 243--JUNIOR STANDING.
3 HOURS

LECT-DISC	A	8	MTUWTHFS	326	L H	AHRENS

SOC 231 ANALYSIS OF JUVENILE DELINQUENCY.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D.G.S. 151 AND 152.
3 HOURS.

LECT-DISC	A	930-11	MTUWTH	340	L H	BORDUA

SOC 243 SOCIAL EVOLUTION.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D.G.S. 151 AND 152.
JUNIOR STANDING.
3 HOURS

LECT-DISC	A	9	MTUWTHFS	326	L H	AHRENS

SOC 277 RURAL SOCIAL CHANGE.
SAME AS R. SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

LECT-DISC	B	9	MTUWTHF	316S	M H	FOLSE
	B	7	TU	316S	M H	

SOC 290 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

CONF		ARR				STAFF

COURSES FOR GRADUATES

SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS R. SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS--JUNE 16 TO JULY 11.
LECT-DISC A 1-3 MTUWTH 316S M H LINDSTROM

SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS R. SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY,
CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
CONF A ARR STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
1/2 TO 2 UNITS
CONF A ARR STAFF

SOC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS
CONF ARR STAFF

SPANISH

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN SPANISH, EXCLUDING SPANISH 101, 102, 103, 104 AND 115, AND INCLUDING AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. EITHER LING. 300, INTRODUCTION TO LINGUISTICS, OR LING. 302, COMPARATIVE LINGUISTICS MAY BE COUNTED TOWARD THE MAJOR IN SPANISH. EITHER SOC.SCI. 101 OR 102, LATIN-AMERICAN CIVILIZATION, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH AND IS REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN, EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LATIN-AMERICAN STUDIES, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, AND RUSSIAN.

COURSES FOR UNDERGRADUATES

SPAN 101 ELEMENTARY SPANISH, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR SPAN. 101 WITHOUT SPAN. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL.
LECT-DISC 10-12 MTUWTH 170 L H MEINHARDT

SPAN 102 ELEMENTARY SPANISH, II.
PREREQUISITE--SPAN. 101 OR ONE YEAR OF HIGH SCHOOL SPANISH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL
LECT-DISC 8-10 MTUWTH 170 L H

SPAN 103 INTERMEDIATE SPANISH, I.
PREREQUISITE--SPAN. 102 OR TWO YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

LECT-DISC		10-12	MTUWTH	176	L H

SPAN 104 INTERMEDIATE SPANISH, II.
PREREQUISITE--SPAN. 103 OR THREE YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

LECT-DISC		3-5	MTUWTH	327	G H

COURSES FOR ADVANCED UNDERGRADUATES

SPAN 211 INTERMEDIATE COMPOSITION AND CONVERSATION, I.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
3 HOURS

LECT-DISC	E	1	F	170	L H
	E	2	MTUWTHF	170	L H

SPAN 212 INTERMEDIATE COMPOSITION AND CONVERSATION, II.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 211 OR EQUIVALENT.
3 HOURS

LECT-DISC	E	1	F	170	L H
	E	2	MTUWTHF	170	L H

SPAN 213 ADVANCED COMPOSITION AND CONVERSATION, I.
PREREQUISITE--SPAN. 212 OR EQUIVALENT.
3 HOURS

LECT-DISC	E	1	F	170	L H
	E	2	MTUWTHF	170	L H

SPAN 214 ADVANCED COMPOSITION AND CONVERSATION, II.
PREREQUISITE--SPAN. 213 OR EQUIVALENT.
3 HOURS

LECT-DISC	E	1	F	170	L H
	E	2	MTUWTHF	170	L H

SPAN 291 SENIOR THESIS.
FOR CANDIDATES FOR HONORS IN SPANISH.
2 HOURS

CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPAN 308 MODERNISMO AND CONTEMPORARY SPANISH AMERICAN POETRY.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT

LECT-DISC	E	1	MTUWTHF	4	G H	FORSTER
	E	2	F	4	G H	

SPAN 314 SPANISH DRAMA AND POETRY OF THE GOLDEN AGE.
PREREQUISITE--SPAN. 305, 306, 307, OR 308, OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC		3	MTUWTH	4	G H	YUDIN

SPAN 351 PHONETICS.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC		10	MTUWTH	4	G H	KAHANE

SPAN 352 SYNTAX.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC		9	MTUWTH	4	G H	SHOEMAKER

SPAN 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., GER., AND RUSS. 382.
PREREQUISITE--3 YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

LECT-DISC	10	MTU THF	216	L H	NACHTMANN

COURSES FOR GRADUATES

SPAN 421 MODERN SPANISH NOVEL AND ESSAY.
1 UNIT

LECT-DISC	11	MTUWTH	4	G H	SHOEMAKER

SPAN 433 SPANISH-AMERICAN NOVEL--MIDDLE AMERICA.
PREREQUISITE--SPAN. 307 AND 308, OR EQUIVALENT.
1 UNIT

LECT-DISC	2	MTUWTH	4	G H	FORSTER

SPAN 491 SPECIAL TOPICS IN SPANISH.
1/2 OR 1 UNIT

CONF	ARR		STAFF

SPAN 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

CONF	ARR		SHOEMAKER, KAHANE, LEAL

SPEECH AND THEATRE

DEPARTMENT OFFICE 133 L H

MAJOR--TWENTY HOURS IN SPEECH IN ADDITION TO SPCH. 101, 105, AND 141. AT LEAST FIVE OF THE TWENTY HOURS MUST BE IN COURSES NUMBERED 300 OR HIGHER, SPCH. 301 MUST BE INCLUDED. IN DECLARING A MAJOR IN SPEECH THE STUDENT MAY CHOOSE ONE OF THESE AREAS FOR EMPHASIS--GENERAL SPEECH, PUBLIC ADDRESS, INTERPRETATION, THEATRE, SPEECH SCIENCE AND PHONETICS, SPEECH CORRECTION AND AUDIOLOGY.
THE STUDENT SHOULD REPORT TO 133 LINCOLN HALL TO BE ASSIGNED AN AREA ADVISER WITH WHOM HE MAY CONFER CONCERNING REQUIRED AND RECOMMENDED COURSES. A MINOR PROGRAM IN ENGLISH MAY NOT INCLUDE MORE THAN THREE HOURS IN LITERATURE COURSES OPEN TO FRESHMEN AND SOPHOMORES AND MAY NOT INCLUDE RHET. 101, 102, 151, 271, AND 272. NO LANGUAGE COURSES MAY SATISFY THE MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THE LANGUAGE DEPARTMENTS.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED WITH THE APPROVAL OF THE STUDENTS MAJOR ADVISER AND HIS DEPARTMENT HEAD. IF TWO MINOR SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE INCLUDED IN EACH.

TWO TEACHER-TRAINING CURRICULA ARE OFFERED IN SPEECH. SEE THE CURRICULUM PREPARATORY TO SPEECH CORRECTION WORK AND THE CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH.

COURSES FOR UNDERGRADUATES

SPCH 101 PRINCIPLES OF EFFECTIVE SPEAKING.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

LECT-DISC	A	8	MTUWTH	145	L H		WINDESHEIM
	A	8-10	F	145	L H		
LECT-DISC	B	9	MTUWTH	132	L H		MUELLER
	B	9-11	F	132	L H		
LECT-DISC	C	10	TUWTHF	130	L H		NELSON
	C	10-12	M	130	L H		
LECT-DISC	E	1-3	M W F	255	ARMORY		MUELLER

SPCH 111 BUSINESS AND PROFESSIONAL SPEAKING.
PREREQUISITE--SPCH. 101.
2 HOURS

LECT-DISC	B	9	MTUWTH	262	ARMORY		OLSON

SPCH 141 ORAL INTERPRETATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
*ONE HOUR TO BE ARRANGED

LECT-DISC	D	*11	MTUWTHF	255	ARMORY		BURNS

COURSES FOR ADVANCED UNDERGRADUATES

SPCH 208 CLASSROOM PROBLEMS IN SPEECH CORRECTION.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

LECT-DISC	C	10	M WTHF	145	L H		GOOD
	C	10-12	TU	145	L H		

SPCH 291 HONORS COURSE.
PREREQUISITE--SENIOR STANDING, A GRADE-POINT AVERAGE OF 4.0 OR CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

CONF		ARR					STAFF

SPCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF SPEECH, GRADE-POINT AVERAGE OF 3.75, CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPCH 301 GENERAL PHONETICS.
SAME AS LING. 301.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	C	10	MTUWTH	304	L H		HULTZEN
	C	3	TU TH	330	I H		

SPCH 312 AMERICAN PUBLIC ADDRESS.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	C	10	TUWTHF	116	L H		BROADRICK
	C	9-11	M	116	L H		

SPCH 342 ORAL INTERPRETATION OF POETRY.
PREREQUISITE--SPCH. 141.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	D	11-1	M W F	262	ARMORY		LONG

SPCH 353 CREATIVE DRAMATICS FOR CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

LECT-DISC	E	1-3	M W F	112	G H		

SPCH 355 ADVANCED PLAY DIRECTING.
PREREQUISITE--SPCH. 255 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC C 10-12 M W F L H THEATER SWANSON

SPCH 376 SPEECH SCIENCE, II.
SAME AS LING. 376.
PREREQUISITE--SPCH. 375 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
*ONE HOUR TO BE ARRANGED
LECT-DISC B *9 MTUWTHF 104 SP CLINIC ZEMLIN

COURSES FOR GRADUATES

SPCH 403 SEMINAR FOR TEACHERS OF SPEECH.
1 UNIT
LECT-DISC ARR BURNS

SPCH 412 THE ROMAN TRADITION IN RHETORIC AND ORATORY.
1 UNIT
LECT-DISC ARR DIETER

SPCH 423 THE RHETORIC OF ARISTOTLE.
1 UNIT
LECT-DISC ARR NADEAU

SPCH 451 PROBLEMS IN PLAY DIRECTING IN THE EDUCATIONAL THEATRE.
1 UNIT
LECT-DISC 10-12 TU TH 262 ARMORY SWANSON

SPCH 461 ADVANCED THEATRE TECHNIQUES.
PREREQUISITE--AT LEAST 1 SEMESTER OF GRADUATE STUDY IN THE AREA OF THEATRE, CONSENT OF HEAD OF DEPARTMENT AND OF INSTRUCTOR.
1/2 OR 1 UNIT
LECT-DISC ARR BEHRINGER

SPCH 465 SEMINAR IN THEATRE ART.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT
LECT-DISC ARR HEWITT

SPCH 473 SEMINAR IN PHONETICS.
SAME AS LING. 473.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC ARR HULTZEN

SPCH 484 PSYCHOLOGY OF SPEECH AND HEARING DISORDERS, II.
SAME AS PSYCH. 484.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC ARR 106 SP CLINIC ONEILL

SPCH 486 ADVANCED CLINICAL TECHNIQUES IN SPEECH AND HEARING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 4 UNITS
LECT-DISC ARR 104 SP CLINIC ONEILL AND STARK

SPCH 489 SEMINAR IN ORGANIC SPEECH DISORDERS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
LECT-DISC ARR 121 L H NELSON

SPCH 492 ADVANCED AUDIOLOGY.
PREREQUISITE--SPCH. 395 AND 397.
1 UNIT
LECT-DISC ARR 106 SP CLINIC STARK

SPCH 495 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF THE HEAD OF THE DEPARTMENT.
*OPEN TO MASTERS CANDIDATES FOR ONE UNIT, TO DOCTORS CANDIDATES FOR ONE OR TWO UNITS.
*1 OR 2 UNITS
CONF ARR STAFF

SPCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR STAFF

THEORETICAL AND APPLIED MECHANICS

DEPARTMENT OFFICE 212 T L

COURSES FOR UNDERGRADUATES

T A M 150 ANALYTICAL MECHANICS--STATICS.
PREREQUISITE--PHYCS. 101 OR 106. REGISTRATION IN MATH. 142 OR MATH. 143.
2 HOURS
LECT-DISC P 8 MTU THF 313 T L

COURSES FOR ADVANCED UNDERGRADUATES

T A M 211 ANALYTICAL MECHANICS--DYNAMICS.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR MATH. 143.
3 HOURS
LECT-DISC P 9 MTUWTHFS 313 T L

T A M 221 ELEMENTARY MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR MATH. 143.
3 HOURS
LECT-DISC P 10 MTUWTHFS 306B T L

T A M 223 MECHANICAL BEHAVIOR OF SOLIDS.
PREREQUISITE--REGISTRATION IN T.A.M. 221.
1 HOUR
LAB P 3-5 M W 225 T L

T A M 235 FLUID MECHANICS.
PREREQUISITE--T.A.M. 211 OR T.A.M. 212.
4 HOURS
LECT-DISC E 9 MTUWTHFS 310 T L
LECT-DISC E 3-5 TU TH 126 T L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

T A M 311 MECHANICAL VIBRATIONS.
PREREQUISITE--T A M 154 OR 156 OR 211 AND 221.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC P 11 MTUWTHFS 306B T L

T A M 321 ADVANCED MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T A M 221 AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT
*SECTION J IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA.
LECT-DISC P 8 MTUWTHFS 306B T L
LECT-DISC *J 8 MTUWTHF 105 T B
*J 1-3 TU TH 225 T L

T A M 326 EXPERIMENTAL STRESS ANALYSIS.
PREREQUISITE--T A M 150, 211, 221, AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT
LAB-DISC Z 10-12 MTU THF 302C T L

T A M 346 DIMENSIONAL ANALYSIS AND THEORY OF MODELS.
3 HOURS, OR 1/2 OR 1 UNIT
LECT-DISC Z 9 MTUWTHFS 306B T L

COURSES FOR GRADUATES

T A M 441 APPLIED ANALYSIS IN ENGINEERING, I.
PREREQUISITE--MATH. 143.
1 UNIT
LECT-DISC 10 MTUWTHFS 310 T L

T A M 493 ADVANCED INDEPENDENT STUDY--SPECIAL PROBLEMS.
1/2 TO 2 UNITS
CONF ARR

T A M 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
CONF ARR

VETERINARY MEDICAL SCIENCE

DEPARTMENT OFFICE 131 V M

COURSES FOR GRADUATES

V M S 408 PRINCIPLES OF HEMATOLOGY.
PREREQUISITE--V.M.S. 301 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1/2 UNIT
LAB-DISC A ARR 350 V M ST CLAIR

V M S 459 ADVANCED CORRELATIVE PATHOLOGY.
PREREQUISITE--V.M.S. 335, 308, 445, 450, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
LAB-DISC A ARR 32 V M SIMON

V M S 460 ADVANCED VETERINARY PHYSIOLOGY.
PREREQUISITE--V.M.S. 315, 316, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT
LAB-DISC A ARR 232 V M REBER
LAB TO BE ARRANGED.

V M S 492 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT
LAB A ARR STAFF

V M S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
LAB ARR STAFF

V M 392 SPECIAL PROBLEMS.
PREREQUISITE--PROFESSIONAL STANDING IN VETERINARY CURRICULUM AND GRADE POINT AVERAGE OF 3.5.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 1 UNIT
*3 HOURS, OR 1/2 UNIT
LAB A ARR STAFF

ZOOLOGY

DEPARTMENT OFFICE 345 N H

MAJOR--TWENTY HOURS IN ZOOLOGY, EXCLUDING ZOOL. 101, 104, 106, 107, BIOL. 151, D G S 131 AND 132, AND BIOL. 101 AND 102 AT NAVY PIER. AT LEAST ONE COURSE MUST BE TAKEN IN EACH OF THE FOLLOWING AREA-GROUPS OF COURSES--

GENETICS AND DEVELOPMENT--ZOOL. 210, 333, 367
CELLULAR AND PHYSIOLOGICAL ZOOLOGY--ZOOL. 301, 302, 312, 334
ECOLOGY AND BEHAVIOR--ZOOL. 342, 343, 345, 346, 369
MORPHOLOGY AND SYSTEMATICS--ZOOL. 132, 142, 304, 305, 318, 321, 324, 332, 335, 336, 337, 338, 340, 344

BIOL 203, 204, 251, 351, AND ALL 200-, 300-, AND 400-LEVEL ZOOLOGY COURSES, EVEN IF NOT INCLUDED IN THE PRECEDING AREA LISTS, AUTOMATICALLY COUNT TOWARD THE TWENTY HOURS. ALSO REQUIRED ARE ONE YEAR OF PHYSICS, CHEMISTRY THROUGH ORGANIC, AND MATHEMATICS THROUGH ANALYTIC GEOMETRY WITH CALCULUS HIGHLY RECOMMENDED. ALSO HIGHLY RECOMMENDED IS ONE COURSE IN GENERAL BOTANY, MICROBIOLOGY, OR GEOLOGY. THESE REQUIREMENTS ARE EFFECTIVE FOR ALL UNDERGRADUATE STUDENTS ENTERING THE UNIVERSITY AFTER SEPTEMBER 1963.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANIMAL SCIENCE, TO BE CHOSEN FROM COURSES 100, 110, 230, 305 OR 330, ANTHROPOLOGY, BOTANY, CHEMISTRY, EDUCATION, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, MATHEMATICS MICROBIOLOGY, PHYSICS, PHYSIOLOGY, AND PSYCHOLOGY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 131 AND 132 MAY BE SUBSTITUTED FOR ZOOL. 101 OR 104 WHEREVER EITHER OF THE LATTER CONSTITUTES A PREREQUISITE.

ZOOL 101 GENERAL ZOOLOGY.
FIELD TRIP.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

LECT	8	MTUWTH	434	N H B	KILLMER, STERN
LAB-DISC	9-12	MTUWTH	313	N H B	WHITE

ZOOL 104 ELEMENTARY ZOOLOGY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

LECT	8	MTUWTH	434	N H B	KILLMER, STERN
LAB-DISC	9-12	MTUWTH	315	N H B	WHITE

ZOOL 132 COMPARATIVE VERTEBRATE ANATOMY.
PREREQUISITE--ZOOL. 101 OR ONE YEAR OF GENERAL BIOLOGY--SUCH AS BIOLOGICAL SCIENCE OR THE BOTANY-ZOOLOGY SEQUENCE, A GRADE OF C IN ZOOL. 101 IS REQUIRED OF FRESHMEN.
*CREDIT IS NOT GIVEN FOR BOTH ZOOL. 132 AND 142.
*5 HOURS

LECT	8	MTUWTHFS	247	N H B	LONG, WALLACE
LAB	9-12	MTUWTH	330	N H B	

ZOOL 210 GENETICS.
SAME AS BOT. 210.
PREREQUISITE--ZOOL. 101 AND BOT. 100 OR CONSENT OF INSTRUCTOR.
4 HOURS

LECT	2	MTUWTH	247	N H B	JOHNSON, RAYL
LAB-DISC	3-5	MTUWTH	314	N H B	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ZOOL 301 GENERAL PHYSIOLOGY.
SAME AS PHYSL. 301.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTHF	140	BUR HALL	ANDERSON
LAB	9-12	MTU	523	BUR HALL	
LAB	10-12	W	523	BUR HALL	
DISC	9	W	523	BUR HALL	

ZOOL 303 INDIVIDUAL TOPICS.
PREREQUISITE--TWO YEARS OF ZOOLOGY, SENIOR STANDING, APPROVAL OF DEPARTMENT.
2 TO 5 HOURS, OR 1/2 OR 1 UNIT

CONF	ARR				STAFF

ZOOL 333 VERTEBRATE EMBRYOLOGY.
PREREQUISITE--ZOOL. 132.
5 HOURS, OR 1 UNIT

LECT	8	MTUWTH	434	N H B	ADAMSTONE, BETZ
LAB	9-12	MTUWTH	323	N H B	

ZOOL 340 NATURAL HISTORY OF THE VERTEBRATES.
PREREQUISITE--ONE YEAR OF BIOLOGY INCLUDING ZOOL. 101, CONSENT OF INSTRUCTOR.
5 HOURS, OR 1 UNIT

LECT	1	MTUWTH	102C	VIVARIUM	SHOEMAKER,
LAB	1-5	F	102B	VIVARIUM	BATCH
LAB	8-12	S	102B	VIVARIUM	

COURSES FOR GRADUATES

ZOOL 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS AN. S. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT

LAB	ARR	NALBANDOV

ZOOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF VERTEBRATES--	
VERTEBRATE ANATOMY	BADER, SMITH, BOCK
ENDOCRINOLOGY	HALL, NALBANDOV
HISTOLOGY	ADAMSTONE
ULTRASTRUCTURE	HALL
FUNCTIONAL ANATOMY	BOCK
VERTEBRATE PHYSIOLOGY	PROSSER
ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF INVERTEBRATES--	
HELMINTHOLOGY	KRUIDENIER, SILVERMAN
INVERTEBRATE ZOOLOGY	GREENBERG, MATTESON
INVERTEBRATE PHYSIOLOGY	GREENBERG, PROSSER
PARASITOLOGY	KRUIDENIER, SILVERMAN
PROTOZOOLOGY	CORLISS
EMBRYOLOGY AND BASIC KNOWLEDGE OF CELLS AND TISSUES--	
CYTOLOGY	ADAMSTONE, DAVENPORT
EMBRYOLOGY AND REGENERATION	DAVENPORT, MOYER, WATTERSON
TOXICOLOGY	INGLE
PRINCIPLES OF ECOLOGY, PRINCIPLES OF TAXONOMY, NATURAL HISTORY--	
ECOLOGY	KENDEIGH
ETHOLOGY	BARLOW
HERPETOLOGY	SMITH
ICHTHYOLOGY	SHOEMAKER
LIMNOLOGY	MATTESON
MAMMALOGY	HOFFMEISTER
ORNITHOLOGY	KENDEIGH, BOCK
WILDLIFE MANAGEMENT	KENDEIGH, SHOEMAKER
GENETICS, PHYLOGENY, EVOLUTION--	
GENETICS AND EVOLUTION	KITZMILLER, LUCE, NANNEY
VERTEBRATE PHYLOGENY & PALEONTOLOGY	BADER

CONF ARR

TRIAL REGISTRATION FORM

Date.....

Name.....
[Surname first; then given names]

College or School.....

Urbana-Champaign
Address.....

Course (or Major).....

Telephone.....

Class.....

Subject (i. e., Department)	Course No.	Sec.	Credit Hours	M	T	W	T	F	S	Memoranda

s1Ia
65

S P Hill

JUNE 21 TO AUGUST 14

1965

SUMMER COURSES

THE LIBRARY OF THE
APR 1 9 1975
UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

BULLETIN · UNIVERSITY OF ILLINOIS · URBANA DEPARTMENTS

UNIVERSITY OF ILLINOIS BULLETIN

Volume 62, Number 56; February, 1965. Published nine times each month by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Office of Publication, 114 Altgeld Hall, Urbana, Illinois 61803.

CONTENTS

Calendar....4
General Information....5
Physical Examination....5
Admission and Readmission....6
Registration....7
Fees....9
Financial Aids....10
Final Examinations....10
Student Welfare....11
Room and Board....11
Illini Union....12
CIC Far Eastern Language Institute.13
Listing of Courses....14
Accountancy....15
Advertising....16
Aeronautical and Astronautical Engineering....17
Agricultural Economics....17
Agricultural Engineering....19
Agriculture....19
Agronomy....20
American Civilization....20
Animal Science....21
Anthropology....22
Architecture....24
Art....25
Asian Studies....30
Astronomy....30
Aviation....31
Bands....34
Biology....34
Biophysics....34
Botany....35
Business....36
Business Administration....37
Business Education....37
Business English....130
Business Law....38
Ceramic Engineering....39
Chemical Engineering....44
Chemistry....41
Civil Engineering....45
Classics....47
Communications....47
Dairy Science....48
Dairy Technology....67
Division of General Studies....48
Economics....49
Educational Administration and Supervision....51
Educational Psychology....52
Electrical Engineering....55
Elementary Education....58
English....61
English for Foreign Students....129
Entomology....65
Finance....65
Food Science....67
Forestry....67
French....68
General Education....70
General Engineering....72
Geography....73
Geology....75
Germanic Languages and Literatures....76
Greek....78
Health Education....79
Health Science....85
History....79
History and Philosophy of Education....81
Home Economics....83
Horticulture....84
Italian....85
Journalism....86
Labor and Industrial Relations....86
Landscape Architecture....87
Latin....87
Latin-American Studies....88
Law....89
Library Science....91
Linguistics....93
Management....94
Marketing....95
Mathematics....96
Mechanical Engineering....101
Medieval Civilization Studies....101
Metallurgical Engineering....102
Microbiology....102
Military Science....103
Mining Engineering....104
Music....105
Nuclear Engineering....112
Philosophy....113
Physical Education....116
Physical Education for Men....115
Physical Education for Women....117
Physics....118
Physiology....119
Plant Pathology....121
Political Science....121
Portuguese....123
Psychology....123
Radio and Television....125
Recreation and Municipal Park Administration....126
Rhetoric and Composition....127
Rural Sociology....18
Russian....130
Russian Language and Area Studies....132
Safety Education....133
Secondary and Continuing Education....133
Social Sciences....135
Sociology....135
Spanish....137
Special Education....139
Speech and Theatre....140
Theoretical and Applied Mechanics....142
Urban Planning....144
Veterinary Medical Science....144
Veterinary Medicine....144
Vocational and Technical Education....145
Zoology....147

CALENDAR FOR EIGHT-WEEK SUMMER SESSION, 1965

May 27, Thurs.-May 28, Fri.....Registration for 1965 Summer Session off-campus courses.

June 7, Mon., 4:10 p.m.....Meeting of Urbana-Champaign Senate.

June 10, Thurs.-June 11, Fri.....Entrance examinations (to remove deficiencies in entrance requirements).

June 21, Mon.....Earliest date for special examinations.

June 21, Mon..... Registration of graduate students not enrolled in the second semester of 1964-65, and undergraduate students.

June 22, Tues., 7:00 a.m.....Instruction begins.

June 22, Tues., 6:45-10:00 p.m.....Qualifying examination in English (for transfer students with eighty or more credit hours only).

June 22, Tues.-June 23, Wed.....Registration of graduate students enrolled in the second semester of 1964-65.

June 28, Mon., 5:00 p.m.....Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range.

July 4, Sun.....Independence Day.

July 5, Mon.....Independence Day holiday.

July 15, Thurs., 6:45-10:00 p.m.....Qualifying examination in English.

July 19, Mon.....Beginning of second four-week courses.

July 20, Tues., 5:00 p.m.....Latest date for refund of one-half tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range.

July 21, Wed.....Earliest date for one-half credit if withdrawing from the University for military service (four weeks completed).

July 29, Thurs.....Latest date to withdraw from the University without petitioning for readmission.

Aug. 2, Mon.....Latest date for special examinations.

Aug. 2, Mon..... Latest date for foreign students who have not attended a college or university in the United States to apply for admission in September, 1965.

Aug. 4, Wed.....Earliest date for full-credit if withdrawing from the University for military service (six weeks completed).

Aug. 12, Thurs.....Last day of instruction.

Aug. 13, Fri.-Aug. 14, Sat.....Summer Session final examinations.

Aug. 16, Mon.-Sept. 11, Sat.....Corps of Engineers post-Summer Session courses.

Aug. 25, Wed.....Earliest date for special examinations.

Aug. 30, Mon.....Latest date for domestic students, or foreign students who have attended a college or university in the United States, to apply for admission or readmission in September, 1965.

GENERAL INFORMATION

To serve those who desire to pursue summer study, the University of Illinois Urbana is offering a comprehensive schedule of courses of eight weeks dura- on, June 21 to August 14, 1965. A few departments are offering special intensive urses lasting only four to six weeks. All colleges on the Urbana campus are cluded in the summer program.

The University of Illinois Undergraduate Division at Chicago also is offering urses for eight weeks from June 25 to August 20, 1965.

Courses in the eight-week Summer Session are selected to meet the needs school teachers and administrators, librarians, athletic coaches, and others hose employment prevents attendance during the regular school year, as well as aduate students pursuing work leading to advanced degrees, undergraduate stu- nts at the University of Illinois or elsewhere who wish to accelerate their pro- ams of study, and other persons for whom summer study will contribute to cational or personal goals. The needs of teachers are met not only in the urses and workshops in the College of Education, but also in a variety of urses eleswhere in the University.

Undergraduate and graduate students interested in taking independent study urses (reading and research) should confer with the head of the department ncerned.

The resources of the University are open to students throughout the summer. ıey may take advantage of the extensive facilities of the University Library, largest in any state university and third among all American universities, with nost 5,000,000 books, films, pamphlets, music scores and parts, maps, manu- ipts, and almost 19,000 periodicals and newspapers. They may profit from the iseums, collections, shops, and laboratories. There are cultural and recreational portunities — lectures, readings, concerts, theatre productions, dances, and cial events.

General information concerning admission, registration procedures, fees, and ard and room is given below. The courses offered in the eight-week Summer ssion are listed alphabetically beginning on page 15.

The final date on which any student may withdraw from a course without epting a grade of "E" in advance is determined by the dean of his college. r undergraduate students registered as non-degree candidates in the Summer ssion, this date is July 26, 1965.

PHYSICAL EXAMINATION

All new students proposing to enroll in the University of Illinois at Urbana- ampaign for a full semester are required, before completion of their first istration, to present adequate evidence of satisfactory physical and mental ılth as determined by the Director of Health Services.

The pre-entrance examination, except for foreign students, may be performed the student's expense by a properly qualified doctor of medicine of his choice by the Health Service free of charge until fifteen days prior to the registration e for the particular semester. It must be performed within the six-month iod immediately preceding the registration date and is subject to final evalua- ı and approval by the Director of Health Services. Detailed explanatory terial and medical forms for reporting the pre-entrance examination are for- rded to each student who receives a permit to enter in a fall or spring ıester.

New students enrolling in the Summer Session are required to take the erculin test administered without charge by the Health Service as part of the istration procedure, but are not required to take the physical examination until h time as they enroll for a full semester. The tuberculin test is also adminis- d during registration to all readmitted students who have been absent for a ıester or more. Anyone who has had a normal chest film within the past six ıths, and presents evidence thereof, is excused from the tuberculin test.

All high school and elementary school students coming to the campus for iods exceeding ten days are required to pass a physical examination, but are required to take the tuberculin test.

In any particular situation where it is deemed advisable by the Health Service for public health reasons, the physical examination and tuberculin test may be required. All foreign students must pass a physical examination administered by the University Health Service before receiving a permit to register, and all students who have lived abroad for an academic year or its equivalent are required to have a complete physical examination when returning to reregister in the University.

ADMISSION AND READMISSION

Admission as Candidates for Degrees

All students, *graduate and undergraduate,* not previously enrolled at the University of Illinois who are planning to register for the first time this summer should submit applications for admission to the Dean of Admissions and Records well in advance of June 21, 1965. Application blanks may be obtained by writing to the Office of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61803.

Undergraduate students who wish to transfer to the University from another college or university should submit as early as possible the completed application for admission. In addition, if the applicant is to be a candidate for a degree official high school and college transcripts of record must be sent directly from each institution previously attended.

Candidates for advanced degrees who were registered in the Graduate College for resident study, or in extramural courses as degree candidates, in the 1964 Summer Session or in the first or second semester of 1964-65, *need not apply for readmission to the Summer Session.*

Other former graduate students, and undergraduate students not in attendance the second semester of 1964-65, who expect to return this summer, should file applications for readmission well in advance of registration in order to allow ample time for preparation of registration materials. This will facilitate the entire procedure for each student concerned and avoid unnecessary delay in completing his registration. Those who have not notified the Dean of Admissions and Records in advance of registration day of their intentions to re-enter, and new students who have not received a permit to enter, should go first to the Office of Admissions and Records. Undergraduate students report to 100a Administration Building; graduate students report to 176 Administration Building. *They may go there at any time without respect to the alphabetical order of registration on page 8.*

For additional information on any matter concerning admission, write to the Dean of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61803.

Admission of New Undergraduate Students as Candidates for Degrees

Application for admission to the 1965 Summer Session from new undergraduates, as candidates for degrees, whose credentials show that they have met the requirements of the requested curriculum as published in the University Undergraduate Study catalog, are considered as indicated below.

RESIDENTS OF ILLINOIS

1. *Freshmen* who rank in the upper half of their high school graduating classes.
2. *Freshmen* who rank in the lower half of their high school graduating classes who present one of the following evidences of ability to do satisfactory work at the University:
   a. A passing score on a test, or tests, as prescribed by the All-University Committee on Admissions. (Either the ACT or the SAT of the CEEB have been approved for this purpose, but those presenting SAT scores still must submit ACT scores no later than fifteen days following registration.)
   b. Evidence of having attempted twelve or more semester hours of work in another college or university of recognized standing, and meeting the regular University requirements for admission as a transfer student.

c. Applying for admission to a session which begins at least twelve months after graduation from high school, provided that (1) in this twelve-month period the applicant has not attempted as much as twelve semester hours of work at another college or university of recognized standing, and (2) he meets all other University requirements for admission that are applicable to him.

. *Transfers* who satisfy the scholastic and other requirements specified in the Undergraduate Study catalog.

NONRESIDENTS OF ILLINOIS

. *Freshmen* who rank in the upper 50 per cent of their high school graduating classes.

. *Transfers* whose scholastic averages are at least 3.0 (C).

(Effective in June, 1966, nonresident freshmen must rank at least in the ighest quarter of their high school classes, and nonresident transfer students nust present a pre-transfer average of at least 3.25.)

Minimum requirements are higher in some curricula. Applicants ranking elow established minimums are usually not admissible.

Admission and Readmission as Non-Degree Candidates

Applications of undergraduate students for admission or readmission to the ummer Session, not as candidates for degrees, should be submitted to the Office f Admissions and Records well in advance of registration day. They may be pproved under one of the following conditions:

. Former students who were eligible for readmission when they left the University may register in the summer upon approval of the Dean of Admissions and Records.

. Transfer students who present a statement of eligibility to return to the collegiate institution last attended.

. Persons employed as teachers who submit statements from the school authorities attesting to their employment.

. Others, twenty-one or more years of age, who give evidence that they possess the requisite background and ability to pursue profitably summer courses for which they are qualified. They must receive the approval of the Dean of Admissions and Records.

Students on drop or probationary status must petition the Summer Session ffice for admission.

Students admitted to the Summer Session as non-degree candidates who later ish to enter one of the colleges of the University as degree candidates must seek dmission at that time in the usual manner from the Office of Admissions and ecords.

REGISTRATION

Eight-Week Courses

Monday, June 21, through Saturday, August 14, 1965

No course may be taken for graduate credit unless it is so designated in this ime Table of courses offered. The normal credit which a graduate student can arn in eight weeks is two units. In exceptional cases two and one-half units ay be carried with the approval of the adviser. Under no circumstances is a raduate student permitted to carry more than two and one-half units.

Further information concerning the regulations for advanced degrees is contained in the catalog of the Graduate College, copies of which may be obtained by riting to the Dean of Admissions and Records, 100a Administration Building, or e Dean of the Graduate College, 330 Administration Building.

REGULAR REGISTRATION

Monday, June 21, 1965

Graduate Students

(*Not* registered on the Urbana campus for the second semester of 1964-65)

The program card and other preliminary registration materials may b obtained in advance of registration day at the department offices on or afte Tuesday, June 15. After the preliminary materials have been completed in con sultation with the adviser, authorization cards for registration will be distribute in the English Building (enter the northwest door).

Undergraduate Students

Both new and former Summer Session students not assigned to a colleg will receive registration forms at the Information Table located inside the north east entrance of the Armory; other undergraduate students receive registratio materials at the offices of the deans of their colleges.

Graduate and Undergraduate Students

Authorization cards to complete registration are released in accordance wit the following schedule, *but not before.*

Nonacademic employees and student registration staff (special permit required)	8:00 a.n
A through B	10:00 a.n
C through E	10:30 a.n
F through G	11:00 a.n
H through J	1:30 p.n
K through L	2:00 p.n
M through O	2:30 p.n
P through R	8:00 a.n
S	8:30 a.n
T through Z	9:00 a.n

DEFERRED REGISTRATION

Tuesday, June 22, and Wednesday, June 23, 1965

Graduate Students

(Registered on the Urbana campus for the second semester of 1964-65)

Program cards and other preliminary materials should be obtained from tl department offices. Authorization cards will be distributed in the English Buil ing (enter the northwest door), according to the following schedule:

A through E	Wednesday afternoon, June
F through K	Tuesday morning, June
L through R	Tuesday afternoon, June
S through Z	Wednesday morning, June

Regular and deferred registration will be completed in the Armory throu Wednesday, June 23, 1965. After June 23, authorization cards will be distribut from the college offices, and registrations will be completed in the Administrati Building. Any registration completed on Thursday, June 24, and thereafter, w be considered a late registration, and the student will be subject to a late registr tion fine of $15.00 in addition to the usual tuition and fee charges.

Second Four-Week Courses

Monday, July 19, through Saturday, August 14, 1965

Students wishing to register only in courses offered in the second four wee of the eight-week Summer Session should complete their registration on before Monday, July 19, 1965.

Directory of Registration Offices

.dmissions and Records:
Graduates.....176 Administration Building
Undergraduates.....100a Administration Building
.griculture, College of.....104 Mumford Hall
.viation, Institute of.....318 Civil Engineering Hall
ommerce and Business Administration, College of.....214 David Kinley Hall
.ducation, College of.....110 Education Building
.ngineering, College of.....119 Civil Engineering Hall
ine and Applied Arts, College of.....110 Architecture Building
raduate College.....330 Administration Building
ournalism and Communications, College of.....119 Gregory Hall
aw, College of.....209 Law Building
iberal Arts and Sciences, College of.....294 Lincoln Hall
hysical Education, College of:
Men.....107 Huff Gymnasium
Women.....117 Women's Gymnasium
ummer Session.....349 Administration Building
'eterinary Medicine, College of.....135 Veterinary Medicine Building

FEES

All fees are due and payable in full at the time of registration unless the ıstallment Plan is elected. An additional charge of $2.00 is made for this service. 'he fees are as follows:

	Full Program		Partial Programs			
	Range I		Range II		Range III	
	Above 5 hours		Above 2½ to 5 hours		Above 0 to 2½ hours	
	Above 1¼ units		Above ¾ to 1¼ units		Above 0 to ¾ unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
'uition (except those holding exemptions)	$45.00	$130.00	$30.00	$90.00	$20.00	$55.00
:ervice Fee[1]	20.00	20.00	13.00	13.00	5.00	5.00
ospital-Medical-Surgical Insurance Fee[2, 3]	10.00	10.00	10.00	10.00	10.00	10.00
Total	$75.00	$160.00	$53.00	$113.00	$35.00	$70.00

Registration in Noncredit Courses (All Campuses)

Students who register in noncredit courses pay tuition fees as follows:

Persons registered *on campus* for doctoral thesis research only without credit are charged a tuition fee of $10.00 plus a Service Fee of $5.00 and the Hospital-Medical-Surgical Insurance Fee.

Persons registered for doctoral thesis research *in absentia* without credit are charged only a tuition fee of $10.00.

No charge is made for noncredit registrations in seminars, either alone or in addition to other courses. (Regular tuition and fees which are applicable are assessed for other courses taken concurrently.)

Persons not holding tuition waivers who are registered for less than a full program of credit courses (as defined under Range II or III in the fee schedule above) pay $15.00 for each noncredit course in addition to the required tuition and fees for the credit courses. If taken alone, noncredit courses other than thesis research and seminars are assigned to Range III.

University employees who register at the request of their department in noncredit courses especially established to improve the work of the employee are

---

Persons on the academic, administrative, or permanent nonacademic staff of the University, on the staffs of allied agencies, and persons registered *in absentia* or in courses taught off-mpus are exempt from the Service Fee.

Students presenting evidence of equivalent coverage may receive a waiver of this fee upon pproval of a petition submitted to the University Insurance Office not later than the final ıy established for full refund of fees. Persons registered for thesis research *in absentia* are ıt assessed this fee.

If insurance coverage for the period between the close of the summer session and the begin-ng of the first semester is not desired, $5.00 of the fee will be refunded if requested in riting prior to the final date established for full refund of fees.

not charged for such courses. (Regular tuition and fees which are applicable are assessed for other courses taken concurrently.)

6. The Visitor's Fee for campus courses is $15.00 per course for all persons not holding tuition waivers who are not registered in a full program. A special permit is required to attend a class as a visitor.

The above list of fees includes only those that are generally applicable to all students at Urbana. Complete information concerning fees applicable only in special cases (as change of program after registration, flight instruction fee, visitor's fee, etc.) and fee exemption regulations are contained in the University's Undergraduate Study and the Graduate College catalogs, and the current edition of *Regulations Applying to All Undergraduate Students,* or may be obtained in 126 Administration Building.

FINANCIAL AIDS

Limited amounts of scholarship and loan funds are available for students attending the University in the summer. For detailed information about scholarships, write to the Director of the Undergraduate Scholarship Program, 100a Administration Building, Urbana, Illinois 61803. Application blanks and information about loan funds at the University of Illinois in Urbana may be obtained from the office of the Bursar, 100b Administration Building, Urbana 61803, or the offices of the Dean of Men, 110 Student Services Building, or the Dean of Women, 130 Student Services Building, Champaign, Illinois 61822. Information concerning National Defense Education Act loan funds may be obtained from the office of the Dean of Students, 310 Student Services Building, Champaign 61822.

FINAL EXAMINATIONS

Eight-Week Courses

Friday, August 13, and Saturday, August 14, 1965

Final Examinations Must Be Given at the Times Specified Unless a Change Is Approved in Advance by the Provost

The examinations for classes meeting four, five, or six times a week are *two hours* in length; those for classes meeting one, two, or three times a week are *one hour* in length. Where it is desired to give a two-hour examination in a course regularly scheduled for a one-hour examination, the time for the examination should be arranged by the instructor at any hour on either of the examination days that will avoid conflicts.

Examinations for courses meeting only once a week, courses meeting at 12:00 noon or after 4:00 p.m., and laboratory or graduate courses, including seminars, also should be arranged by the instructor at any hour within the examination period that will avoid conflicts.

For courses meeting two to six times a week, the schedule of examinations is as follows:

Seven o'clock classes

Meeting four, five, or six times a week.....Friday, 7:00- 9:00 p.m.
Meeting MWF, or any two of those days.....Friday, 7:00- 8:00 p.m.
Meeting TTS, or any two of those days.....Friday, 8:00- 9:00 p.m.

Eight o'clock classes

Meeting four, five, or six times a week.....Saturday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Saturday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 9:00-10:00 a.m.

Nine o'clock classes

Meeting four, five, or six times a week.....Saturday, 10:00 a.m.-12:00 noon
Meeting MWF, or any two of those days.....Saturday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days....Saturday, 11:00 a.m.-12:00 noon

Ten o'clock classes

Meeting four, five, or six times a week.....Saturday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 2:00- 3:00 p.m.

Eleven o'clock classes

Meeting four, five, or six times a week.....Friday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Friday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Friday, 9:00-10:00 a.m.

One o'clock classes

Meeting four, five, or six times a week.....Friday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Friday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Friday, 2:00- 3:00 p.m.

Two o'clock classes

Meeting four, five, or six times a week.....Friday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Friday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Friday, 4:00- 5:00 p.m.

Three o'clock classes

Meeting four, five, or six times a week.....Saturday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 4:00- 5:00 p.m.

Four o'clock classes

Meeting four, five, or six times a week.....Friday, 10:00 a.m.-12:00 noon
Meeting MWF, or any two of those days.....Friday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Friday, 11:00 a.m.-12:00 noon

Note: For a course so scheduled that the final examination may be given in more than one period, the earliest time in the examination schedule must be chosen. For example, for a course regularly meeting from 1:00 to 3:00 p.m. on Monday, Wednesday, and Friday, or any two of those days, the examination should be scheduled for Friday, 1:00 to 2:00 p.m., not Friday, 3:00 to 4:00 p.m.

STUDENT WELFARE

The University makes every effort to provide the most favorable conditions for the life of the student while he is living in the community. The Dean of Students coordinates and unifies the work of the agencies interested in the student's well-being and gives advice and guidance on problems outside the classroom. Advisers and members of the faculty assist students in arranging programs of study and advise them relative to their classroom work. Aptitude testing and counseling services are provided by the Student Counseling Service.

The University Health Service for students, located in McKinley Hospital, 1109 South Lincoln Avenue, Urbana, Illinois, is maintained to promote physical and mental health, to control communicable diseases, and to teach the essentials of healthful living. McKinley Hospital serves both students and faculty.

The office of the Dean of Students maintains an employment service for students who desire part-time employment while attending the University. No charge is made for this service.

The offices of the Dean of Students, Student Employment, and the Student Counseling Service are located in the Student Services Building, 610 East John Street, Champaign, Illinois 61822.

ROOM AND BOARD

During the eight-week Summer Session, housing and food service accommodations in University residence halls will be available in the Illinois Street Residence Halls, the newest of the University residence halls. All facilities other than the living units are operated on a coeducational basis with dining, lounge,

recreation, library, and office facilities being shared by the men and women residents. All of the shared facilities are air conditioned. Room and board rates for the entire eight-week session are as follows:

	20 Meals per Week	*15 Meals per Week*
Single Room	$224.00	$199.00
Double Room	204.00	179.00

Arrangements may also be made for rooms without board in one of the other residence halls. Rates for the entire eight-week session are as follows:

Single Room	$104.00
Double Room	84.00

Some space in other residence halls is available for the use of persons attending University-sponsored short courses or conferences during the summer period. The charge for housing accommodations is $3.00 to $4.25 a person per night and the daily charge for meals is $3.75. For information on this type of housing write to the Conference Coordinator, 420 Student Services Building, Champaign, Illinois 61822.

Applications for residence may be obtained from the Housing Division, 420 Student Services Building.

Rooms, and in some cases, room and board, are also available at privately operated housing units near the campus. Facilities in housing of this type are listed in the Housing Division Office. Room lists and additional information may be obtained by writing the Housing Division.

ILLINI UNION

The Illini Union is the community center for the students, faculty, staff, and alumni on the Urbana campus of the University of Illinois. In conjunction with other student organizations, the Illini Union sponsors a broad program of social, cultural, and recreational activities for the students. Among its many facilities are various food service units consisting of a cafeteria, snack bar, dining room and several banquet rooms. The various lounges are meeting places for students and faculty between classes and at other free times. The Browsing Room contains the latest fiction, biography, and other books for general reading as well as a record-lending library. The Illini Union also houses the Book Center, a bookstore which offers high quality paperback editions of American and foreign publications, hard cover University of Illinois Press publications, and some periodicals of limited circulation. Approximately 10,000 titles are available.

Programs of recorded classical music are held under the direction of a student committee. Recreational facilities include bowling, billiard tables, television and rooms for games. Dances are scheduled during the week. All students are entitled to the full use of the facilities of the Illini Union.

ADDITIONAL INFORMATION

For additional information concerning attendance in the Summer Session at the University of Illinois, write to:

Dean of Admission and Records
University of Illinois
100a Administration Building
Urbana, Illinois 61803

THE CIC FAR EASTERN LANGUAGE INSTITUTE AT OHIO STATE UNIVERSITY

June 21 through August 27, 1965

The Committee on Institutional Cooperation (CIC), consisting of the universities of "The Big Ten," plus the University of Chicago, offers the second of five rotating Far Eastern Language Institutes at Ohio State University.

For qualified University of Illinois undergraduate students who participate in this program, the courses will be exactly as though taken at this University. That is, they will count toward the degree and they will count as residence credit.

The faculty will be drawn from the Chinese and Japanese teaching staffs of the CIC institutions, to whom specialists from universities outside the Big Eleven will be added.

A limited number of grants for scholarships and fellowships will be available for students who show high competence.

During the summer of 1965 intensive courses will be offered in elementary and advanced Chinese and Japanese at the undergraduate and graduate level. University of Illinois graduate students who participate in the program may petition for credit in the usual way if the work taken is at the graduate level.

Students desiring further information concerning these courses or forms of financial aid connected with the program should see Director Solomon B. Levine, 1207-9 West Oregon Street, Urbana, Illinois 61803.

LISTING OF COURSES

The following time table of summer courses offered by the University is subject to whatever changes may prove necessary at registration time. Notices of all changes in time or place of meeting of classes will be supplied to advisers for checking program cards during registration. Names of instructors are listed subject to their acceptance of appointment for summer service.

Arrangement

The arrangement of subjects in this time table is alphabetical. The courses offered in each subject are listed numerically with headings to indicate the students for whom they are designed. Courses for undergraduates (designed for freshmen and sophomores) are numbered 100 to 199; for advanced undergraduates (designed for juniors and seniors), 200 to 299; for advanced undergraduates and graduates (junior, senior, or graduate standing required), 300 to 399; for graduates, 400 to 499. Following the title of each course is a statement of the requirements, if any, for admission to the course.

Class periods for each course are indicated by numerals for the hours of the day and by letters for the days of the week. For example, "8-10 MWF" indicates that the class period begins at 8:00 a.m. and continues for two hours on Monday, Wednesday, and Friday; while "11 TTS" means that the class period begins at 11:00 a.m. and continues for fifty minutes on Tuesday, Thursday, and Saturday. The place of meeting of each class is shown by the number of the room and the name of the building.

Credit

Credit is counted in semester hours for undergraduates and in units for graduates, as shown in the description of each course.

Students having ninety or more hours of credit, without regard to the division in which they may be enrolled, are classified as seniors for the purpose of designating those freshman courses which, when taken by seniors or graduate students, carry reduced credit.

Some courses have variable credit, as 3 to 5 hours or ½ to 2 units, and in registering for a course with variable credit each student puts on his program card the number of hours or units for which he intends to take the course.

Buildings

University buildings are designated by the following abbreviations:

Administration Building.....Admin
Aeronautical Engineering Laboratory..Aero Lab
Agricultural Engineering Building.....Agr Eng
Altgeld Hall.....AH
Animal Genetics Building.....An Gen
Animal Sciences Laboratory.....ASL
Architecture Building.....Arch
Bevier Hall.....Bev Hall
Burnsides Research Laboratory.....BRL
Burrill Hall.....Bur Hall
Ceramics Building.....Cer
Chemistry Annex.....CA
Child Development Laboratory.....CD
Civil Engineering Hall.....CEH
Commerce Annex.....Com Annex
Commerce and Business
Administration Building.....Com W
Dairy Manufactures Building.....DMB
Davenport Hall.....DH
David Kinley Hall.....DKH
East Chemistry Building.....EC
Education Building.....Educ
Educational Project and Guidance
Building.....EPGB
Electrical Engineering Annex.....EE Annex
Electrical Engineering Building.....EEB
English Building.....EB
Fine and Applied Arts Building.....FAB
Floriculture Building.....Flor
Foundry and Pattern
Laboratory.....Fdy & Pat Lab
Gregory Hall.....GH
Harker Hall.....HH
Hill Annex.....HA
Horticulture Field Laboratory.....HFL
Huff Gymnasium.....HG
Hydraulic Engineering
Laboratory.....Hyd Eng Lab
Illini Hall.....IH
Krannert Art Museum.....KM
Labor and Industrial Relations Building....ILIR
Law Building.....Law
Library.....Lib
Lincoln Hall.....LH
Mechanical Engineering Building.....MEB
Mechanical Engineering Laboratory.....MEL
Men's Old Gymnasium.....MOG
Metallurgy and Mining Building.....MMB
Morrill Hall.....Mor Hal
Mumford Hall.....MH
Natural History Building.....NHB
Noyes Laboratory of Chemistry.....NL
Nuclear Engineering Laboratory.....NEL
Observatory.....Obser
Physics Building.....PB
Practice Annex.....PA
Quonset.....Q
Rehabilitation-Education Center..Rehab Cente
Rural Electric Laboratory.....RE Lab
Smith Music Hall.....SMH
Speech Clinic.....Sp Clini
Stiven House.....SH
Stock Judging Pavilion.....SJ
String Annex.....SA
Surveying Building.....Surv Bld
Talbot Laboratory.....TL
Theory Annex.....TA
Transportation Building.....TB
Turner Hall.....TH
University High School.....UHS
Vegetable Crops Building.....Veg Crop
Veterinary Clinic, Large Animal.....VCL
Veterinary Clinic, Small Animal.....VCS
Veterinary Medicine Building.....VM
Women's Gymnasium.....W Gym

ACCOUNTANCY

DEPARTMENT OFFICE 360 COM W

COURSES FOR UNDERGRADUATES

ACCY 101 PRINCIPLES OF ACCOUNTING I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
00001 LECT-DISC D 11 MTUWTHFS 152 COM W HOLZER

ACCY 105 PRINCIPLES OF ACCOUNTING II.
PREREQUISITE--ACCY. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
00002 LECT-DISC A 8 MTUWTHFS 226 COM W THOMAS

ACCY 108 INTERMEDIATE ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
00003 LECT-DISC B 9 MTUWTHFS 226 COM W URETSKY

ACCY 166 COST ACCOUNTING.
PREREQUISITE--ACCY. 105.
3 HOURS
00004 LECT-DISC B 9 MTUWTHFS 240 COM W THOMAS

COURSES FOR ADVANCED UNDERGRADUATES

ACCY 201 FUNDAMENTALS OF ACCOUNTING.
FOR NON-COMMERCE STUDENTS ONLY.
3 HOURS
00005 LECT-DISC C 11 MTUWTHFS 245 COM W BRIESKE

ACCY 274 BASIC FEDERAL INCOME TAX ACCOUNTING.
PREREQUISITE--ACCY. 108.
3 HOURS
00006 LECT-DISC A 8 MTUWTHFS 152 COM W CLARKE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ACCY 308 ADVANCED ACCOUNTING.
PREREQUISITE--ACCY. 106 OR 166 AND 108, AN AVERAGE OF C OR BETTER IN PRECEDING COURSES IN ACCOUNTANCY.
3 HOURS, OR 3/4 UNIT
00007 LECT-DISC C 10 MTUWTHFS 166 COM W WAKEFIELD

ACCY 325 ACCOUNTING SYSTEM DESIGN.
PREREQUISITE--ACCY. 308.
3 HOURS, OR 3/4 UNIT
00008 LECT-DISC C 10 MTUWTHFS 226 COM W URETSKY

ACCY 371 AUDITING.
PREREQUISITE--ACCY. 308.
3 HOURS, OR 3/4 UNIT
00009 LECT-DISC D 11 MTUWTHFS 166 COM W WAKEFIELD

ACCY 377 ADVANCED PROBLEMS.
PREREQUISITE--SENIOR STANDING, CREDIT OR REGISTRATION IN ACCY. 371.
3 HOURS, OR 1 UNIT
00010 LECT-DISC D 11 MTUWTHFS 226 COM W LUKAS

COURSES FOR GRADUATES

ACCY 441 STATE AND FEDERAL ACCOUNTING THEORY.
1 UNIT
00011 LECT-DISC 2-4 M TH 166 COM W LUKAS

ACCY 461 ADMINISTRATIVE ACCOUNTING.
1 UNIT
00012 LECT-DISC 2-4 TU F 166 COM W HOLZER

ACCY 472 AUDITING STANDARDS AND TECHNIQUES.
1 UNIT
00013 LECT-DISC 8-10 TU F 166 COM W WYATT

ACCY 481 CONCEPTS AND PRINCIPLES.
1 UNIT
00014 LECT-DISC 8-10 M TH 166 COM W MAUTZ

ACCY 483 INCOME DETERMINATION.
1 UNIT
00015 LECT-DISC 8-10 W S 166 COM W FESS

ACCY 493 SPECIAL RESEARCH PROBLEMS.
1/4 TO 2 UNITS
00016 CONF 2-4 TU 226 COM W MAUTZ

ACCY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
M. S. CANDIDATES SHOULD REGISTER IN SECTION S1, AND PH. D.
CANDIDATES IN SECTION S2.
00017 DISC S1 2-4 W 226 COM W MAUTZ
00018 DISC S2 2-4 W 226 COM W MAUTZ

ADVERTISING

DEPARTMENT OFFICE 103 G H

COURSES FOR ADVANCED UNDERGRADUATES

ADV 281 INTRODUCTION TO ADVERTISING.
*CREDIT IS NOT GIVEN FOR BOTH ADV. 281 AND MKTG. 287.
3 HOURS
*HONORS SECTION.
00019 LECT-DISC 9 MTUWTHFS 113 G H BARBAN

ADV 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS
00020 CONF ARR SANDAGE

COURSES FOR GRADUATES

ADV 483 ADVERTISING AND THE MASS MEDIA.
SAME AS MKTG. AND COMM. 483.
1 UNIT
00021 LECT-DISC 10-12 M W 123 G H BARBAN

ADV 490 SPECIAL TOPICS IN ADVERTISING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 OR 1 UNIT
00022 CONF ARR SANDAGE

ADV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN ADVERTISING.
1 OR 2 UNITS
00023 CONF ARR SANDAGE

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

DEPARTMENT OFFICE 101 T B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

A A E 391 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT
00024 LECT-DISC A ARR

COURSES FOR GRADUATES

A A E 493 SPECIAL PROBLEMS.
1 OR 2 UNITS
00025 CONF A ARR

A A E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00026 CONF A ARR

AGRICULTURAL ECONOMICS
INCLUDING RURAL SOCIOLOGY

AGRICULTURAL ECONOMICS

DEPARTMENT OFFICE 305 M H

COURSES FOR ADVANCED UNDERGRADUATES

AG EC 200 PROBLEMS IN AGRICULTURAL ECONOMICS.
PREREQUISITE--MINIMUM GRADE-POINT AVERAGE 3.5, NOT OPEN TO STUDENTS
ON PROBATION, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT.
SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE
OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
3 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--AGRICULTURAL MARKETING
BARTLETT, BRINEGAR, BROADBENT, HIERONYMUS
JUDGE, KELLY, MUTTI, ROUSH, SCHMIDT,
B--AGRICULTURAL PRICES AND STATISTICAL ANALYSIS
JUDGE, WEST
C--FARM MANAGEMENT AND LAND ECONOMICS
BAKER, DOVRING, HEADLEY, HERBST,
HOLCOMB, REISS, SWANSON, WILLS
D-RURAL ORGANIZATION FOLSE, LINDSTROM
E-AGRICULTURAL LAW HANNAH, KRAUSZ
F-AGRICULTURAL POLICY HALCROW, SCHMIDT, SPITZE
G--AGRICULTURAL FINANCE BAKER, HOLCOMB, SPITZE
00027 CONF ARR

AG EC 230 MARKETING OF AGRICULTURAL PRODUCTS.
FIELD TRIP, ESTIMATED EXPENSE, $3.
3 HOURS
00028 LECT-DISC 7-9 TH 316S M H MUTTI
8 MTUW F 316S M H MUTTI

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG EC 324 FARM OPERATION.
PREREQUISITE--AG. EC. 220.
FIELD TRIPS, ESTIMATED EXPENSE, $5.
3 HOURS, OR 3/4 OR 1 UNIT
FIRST FOUR WEEKS--JUNE 22-JULY 16.
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.

00029	LECT-DISC	*10-12	MTUWTHF	316S	M	H	WILLS

COURSES FOR GRADUATES

AG EC 491 SEMINAR AND SPECIAL TOPICS.
EACH GRADUATE STUDENT WHOSE MAJOR IS AGRICULTURAL ECONOMICS MUST REGISTER IN THIS COURSE.
*ONLY STUDENTS WHO REGISTER FOR CREDIT AND COMPLETE SPECIAL STUDIES UNDER DIRECTION OF ONE OR MORE STAFF MEMBERS WILL RECEIVE CREDIT.
*0 TO 2 UNITS
*SECTION A IS FOR FIRST-YEAR GRADUATE STUDENTS.
*SECTION B IS FOR SECOND-YEAR GRADUATE STUDENTS.

00030	LECT-DISC *A	3-5	TU	405	M	H	STAFF
00031	LECT-DISC *B	3-5	TU	405	M	H	STAFF

AG EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00032	CONF	ARR					STAFF

RURAL SOCIOLOGY
DEPARTMENT OF AGRICULTURAL ECONOMICS.

COURSES FOR ADVANCED UNDERGRADUATES

R SOC 277 RURAL SOCIAL CHANGE.
SAME AS SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

00033	LECT-DISC	B	9	MTUWTHF	316S	M	H	LINDSTROM
		B	7	TU	316S	M	H	

COURSES FOR GRADUATES

R SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS--JUNE 22-JULY 16.

00034	LECT-DISC	1-3	MTUWTH	W223	T	H	LINDSTROM

R SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

00035	CONF	ARR					STAFF

AGRICULTURAL ENGINEERING

DEPARTMENT OFFICE 206 AGR ENG

NOTE THE COURSE IN AGRICULTURAL ENGINEERING FOR NON-ENGINEERING STUDENTS IS 300. COURSES FOR ENGINEERING STUDENTS ARE 296, 299, AND 396.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 296 HONORS PROJECT.
PREREQUISITE--CONSENT OF INSTRUCTOR, 4.5 AVERAGE IN ENGINEERING.
1 TO 4 HOURS
00036 CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 299 UNDERGRADUATE THESIS.
PREREQUISITE--AG. E. 298 AND SENIOR STANDING IN ENGINEERING.
2 TO 4 HOURS
00037 CONF ARR STAFF

AG E 300 SPECIAL PROBLEMS.
PREREQUISITE--NONENGINEERING STUDENT, MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND SPECIAL PROBLEMS COURSE.
3 HOURS, OR 1/2 UNIT
00038 CONF ARR STAFF

AG E 396 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING.
3 HOURS, OR 1/2 UNIT
00039 CONF ARR STAFF

COURSES FOR GRADUATES

AG E 496 PROBLEMS IN AGRICULTURAL ENGINEERING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1 UNIT
00040 CONF ARR STAFF

AG E 499 THESIS RESEARCH.
1 TO 2 UNITS
00041 CONF ARR STAFF

AGRICULTURE

COURSES FOR ADVANCED UNDERGRADUATES

AGR 208 COOPERATIVE EXTENSION WORK--SUMMER TRAINING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS
00042 CONF ARR ANDERSON

AGRONOMY

DEPARTMENT OFFICE 201 T H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AGRON 300 ADVANCED SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
*CREDIT IS NOT GIVEN TO GRADUATE STUDENTS MAJORING IN AGRONOMY.
*3 TO 5 HOURS, OR 1/2 TO 2 UNITS
00043 LAB-DISC ARR STAFF

AGRON 326 WEEDS AND THEIR CONTROL.
PREREQUISITE--AGRON. 121.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS, OR 1/2 UNIT
00044 LECT-DISC 8-10 MTUWTH W109 T H SLIFE

AGRON 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK TO BE TAKEN IN THE FOLLOWING SUBJECTS--
A--SOILS ALDRICH, BEAVERS, FEHRENBACHER, GIESEKING, JONES, KLUTE, KURTZ, MELSTED, ODELL, PATTERSON, PENDLETON, PETERS, RUNGE, SABEY, STEVENSON, TYNER, AND WELCH.
B--CROPS ALEXANDER, BONNETT, BROWN, BURGER, CARMER, EARLEY, GERDEMANN, HADLEY, HAGEMAN, HANSON, HITTLE, HOOKER, HOWELL, JACKOBS, LAUGHNAN, SCOTT, SEIF, SLIFE, WILSON, WOOLLEY.
00045 LAB-DISC ARR

AMERICAN CIVILIZATION

MAJOR--STUDENTS WHO ELECT AMERICAN CIVILIZATION AS A MAJOR MUST COMPLETE FORTY SEMESTER HOURS--WHICH SATISFIES BOTH MAJOR AND MINOR REQUIREMENTS FOR GRADUATION--IN COURSES INDICATED BELOW, AT LEAST TWENTY HOURS BEING IN COURSES NUMBERED 300 OR ABOVE. THEY ARE REQUIRED TO MAINTAIN A 3.0 GENERAL AVERAGE AT ALL TIMES, THAT IS, WHEN THE AVERAGE DROPS BELOW THAT LEVEL THE STUDENT SHALL DROP FROM THIS MAJOR. SPECIFICALLY REQUIRED ARE--

1-ENGL. 255-256, HIST. 151-152, AND EITHER ART 317 OR PHIL. 313--A TOTAL OF FIFTEEN HOURS. EQUIVALENT OR MORE ADVANCED COURSES MAY BE SUBSTITUTED PROVIDED THAT, TAKEN TOGETHER, THEY CONSTITUTE COMPREHENSIVE SURVEYS OF THE THREE FIELDS OF AMERICAN HISTORY, AMERICAN LITERATURE, AND EITHER AMERICAN ART OR AMERICAN PHILOSOPHY. APPROVAL FOR ANY SUCH SUBSTITUTION MUST BE REQUESTED BY A PETITION TO THE DEAN BEARING THE RECOMMENDATION OF THE ADVISER FOR THE CURRICULUM.

2-AT LEAST SIX HOURS OF ADVANCED WORK IN ENGLISH AND AT LEAST SIX HOURS OF ADVANCED WORK IN HISTORY, CHOSEN FROM THE FOLLOWING COURSES ALL OF WHICH ARE IN THE AMERICAN FIELD--ENGL. 144, 285-286, 315-316, 318, 352, 353-354, 375-376, HIST. 335-336, 352, 354, 357-358, 359, 361-362, 363-364, 369-370, 371-372, 373-374. SPEECH 366 MAY BE SUBSTITUTED FOR ENGL. 315-316.

3-AT LEAST SIX HOURS FROM THE FOLLOWING COURSES--ARCH. 215-216, ECON 336, ED. 302, GEOG. 221-222, POL. SCI. 150-151, 351, 381, 397, SPCH. 312, OR COURSES LISTED IN THE PRECEDING PARAGRAPHS, IF NOT COUNTED TOWARD THE REQUIREMENTS THEREUNDER.

4-AT LEAST SIX ADDITIONAL HOURS IN ONE OF THE FOLLOWING DEPARTMENTS-ART, ENGLISH, HISTORY, PHILOSOPHY, OR POLITICAL SCIENCE--CHOSEN FROM COURSES WHICH DEAL WITH NON-AMERICAN ASPECTS OF THE SUBJECT BUT WHICH ARE CLOSELY RELATED TO SPECIFIC COURSES SELECTED UNDER THE PRECEDING REQUIREMENTS, SUCH AS, FOR EXAMPLE, A COURSE DEALING WITH THE SAME PERIOD IN EUROPEAN HISTORY OR IN ENGLISH LITERATURE.

THE COMMITTEE IN CHARGE OF THE CURRICULUM ADVISES EACH STUDENT CONCERNING THESE ADDITIONAL HOURS, ASSUMES RESPONSIBILITY FOR THE STUDENTS REGISTRATION IN THE PROPER COURSES, AND FILES A RECORD OF THE STUDENTS REGISTRATION INDICATING THE SPECIFIC COURSES APPROVED AS SATISFYING THIS REQUIREMENT IN THE OFFICE OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES.

ADVISER--CHAIRMAN OF THE COMMITTEE IN CHARGE--PROFESSOR ROBERT W. JOHANNSEN, 359 ARMORY.

MINORS--THIS CURRICULUM HAS BEEN APPROVED AS A MINOR FOR STUDENTS MAJORING IN GEOGRAPHY, HISTORY, POLITICAL SCIENCE, AND SPEECH. A SPLIT MINOR IS NOT AUTHORIZED. NO COURSE COUNTED TOWARD THE STUDENTS MAJOR MAY BE COUNTED TOWARD THE MINOR. THE MINOR CONSISTS OF AT LEAST TWENTY SEMESTER HOURS, INCLUDING THE REQUIRED COURSES HIST. 151-152 AND ENGL. 255-256, AND IN ADDITION--

1-AT LEAST THREE HOURS FROM COURSES LISTED UNDER -2- OF THE REQUIREMENTS FOR THE MAJOR IN AMERICAN CIVILIZATION, EXCLUDING THOSE NUMBERED UNDER 300 AND THOSE IN THE DEPARTMENT IN WHICH THE STUDENT IS MAJORING.

2-THE REMAINDER, IF ANY, CHOSEN FROM COURSES LISTED UNDER -1- AND -3- OF THE REQUIREMENTS FOR MAJOR IN AMERICAN CIVILIZATION, EXCLUDING THOSE NUMBERED UNDER 300 AND THOSE IN THE DEPARTMENT IN WHICH THE STUDENT IS MAJORING.

ANIMAL SCIENCE

DEPARTMENT OFFICE 328 M H

COURSES FOR ADVANCED UNDERGRADUATES

AN S 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS

00046	LAB	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AN S 301 BEEF PRODUCTION.
PREREQUISITE--AN. S. 220 OR EQUIVALENT.
3 HOURS, OR 3/4 UNIT
FIRST FOUR WEEKS--JUNE 18 - JULY 13.

00047	LECT	1-3	MTUWTHF	W115	T H	GARRIGUS AND
		7-9PM	TU	W115	T H	ALBERT

AN S 330 REPRODUCTION AND ARTIFICIAL INSEMINATION OF FARM ANIMALS.
SAME AS D.S. 330.
PREREQUISITE--ZOOL. 104 AND EITHER D. S. 100 OR AN. S. 100.
3 HOURS, OR 3/4 UNIT, 1/2 UNIT FOR FOUR WEEK SUMMER SESSION
FIRST FOUR WEEKS-JUNE 22 TO JULY 16.
*ADDITIONAL HOURS TO BE ARRANGED

00048	LAB-DISC	*10-12	MTUWTHF	414	A S L	LODGE AND
		8-12	W	414	A S L	GRAVES

COURSES FOR GRADUATES

AN S 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ZOOL. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*COMBINED CREDIT IN AN.S. 407 AND 408 MAY NOT EXCEED TWO UNITS.
1/2 TO 1 UNIT

00049	LAB		ARR	NALBANDOV

AN S 410 RESEARCH METHODS IN ANIMAL SCIENCE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/4 TO 1 UNIT

00050	CONF		ARR	BECKER, BREIDENSTEIN GARRIGUS, SCOT

AN S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00051	CONF		ARR	GRADUATE STAFF

ANTHROPOLOGY

DEPARTMENT OFFICE 137 D H

MAJOR--TWENTY HOURS FROM ANY COURSE IN ANTHROPOLOGY, INCLUDING ANTHROP. 102 AND 103. A DOUBLE MAJOR IN ANTHROPOLOGY AND SOCIOLOGY IS NOT PERMITTED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ECONOMICS, GEOGRAPHY, HISTORY, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND ZOOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES OR IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.
NOTE--INDIVIDUAL INSTRUCTION WILL BE AVAILABLE FOR EDMUND J JAMES SCHOLARS.

COURSES FOR UNDERGRADUATES

ANTH 102 INTRODUCTION TO ANTHROPOLOGY--THE ORIGIN OF MAN AND CULTURE.
*CREDIT IS NOT GIVEN FOR BOTH ANTH. 102 AND SOC. 104.
*4 HOURS

00052	LECT		10-12	MTUW	113	D H	MCGREGOR
00053	QUIZ	A	10-12	TH	113	D H	
00054	QUIZ	B	10-12	F	113	D H	
00055	QUIZ	C	8-10	F	113	D H	

ANTH 160 PEOPLES OF THE WORLD--INTRODUCTION TO ETHNOLOGY.
PREREQUISITE--ANTH. 102 OR 103, SOPHOMORE STANDING.
3 HOURS

00056	LECT-DISC	A	1-3	MTUW	113	D H	JACOBS

ANTH 185 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS.
SAME AS SOC. AND GEOG. 185.
PREREQUISITE--SOC. 100, OR CONSENT OF INSTRUCTOR, OR SIX HOURS IN ANTHROPOLOGY, GEOGRAPHY, POLITICAL SCIENCE, OR SOCIOLOGY.
3 HOURS

00057	LECT-DISC		9-11	TU TH	314	L H	SIMMONS

COURSES FOR ADVANCED UNDERGRADUATES

ANTH 290 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS

00058	CONF	A	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ANTH 354 FIELD TECHNIQUES IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00059	CONF	A	ARR	BAREIS
00060	CONF	B	ARR	ROHN

ANTH 355 LABORATORY TECHNIQUES AND PROBLEMS IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00061	CONF	A	ARR	BAREIS
00062	CONF	B	ARR	ROHN

ANTH 364 FIELD WORK IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED. CONCURRENT REGISTRATION IN ANTH. 365, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00063	CONF	A	ARR	CASAGRANDE

ANTH 365 ANALYSIS OF FIELD DATA IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00064	CONF	A	ARR	CASAGRANDE

ANTH 367 CULTURES OF NATIVE AFRICA.
PREREQUISITE--ANTH. 102 AND 103 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00065	LECT-DISC	A	10-12	MTUW	137	D H	JACOBS

COURSES FOR GRADUATES

ANTH 489 READINGS IN ANTHROPOLOGY.
PREREQUISITE--ONE SEMESTER OF GRADUATE WORK IN ANTHROPOLOGY--CONSENT OF ADVISER.
1/2 OR 1 UNIT

00066	CONF	A	ARR	STAFF

ANTH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS

00067	CONF	A	ARR	STAFF
00068	CONF	B	ARR	STAFF

ARCHITECTURE

DEPARTMENT OFFICE 106 ARCH

IN THE CURRICULUM IN ARCHITECTURE, NORMAL COURSE PROGRESS IN SEQUENCE IS IMPERATIVE. STUDENTS FAILING TO COMPLETE ANY REQUIRED COURSE MORE THAN ONE SEMESTER LATER THAN THE TIME DESIGNATED IN THE CURRICULUM, ARE PROHIBITED FROM PROGRESSIVE REGISTRATION IN ARCHITECTURAL COURSES UNTIL THE DEFICIENCY IS CORRECTED. APPLICABLE TO STUDENTS ENTERING IN SEPTEMBER, 1958.

COURSES FOR UNDERGRADUATES

ARCH 131 ARCHITECTURAL DESIGN.
PREREQUISITE--SOPHOMORE STANDING, ARCH. 101, CREDIT OR REGISTRATION IN G.E. 108, REGISTRATION IN ARCH. 141.
3 HOURS

00069	LAB	9-12	MTUWTHFS	206	F A B	STAFF

ARCH 132 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 131.
3 HOURS

00070	LAB	9-12	MTUWTHFS	206	F A B	STAFF

COURSES FOR ADVANCED UNDERGRADUATES

ARCH 215 HISTORY OF RENAISSANCE AND BAROQUE ARCHITECTURE.
PREREQUISITE--ARCH. 214 OR CONSENT OF INSTRUCTOR.
3 HOURS

00071	LECT	8	MTUWTHFS	120	ARCH	CONNALLY

ARCH 233 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 132, CREDIT OR REGISTRATION IN T A M 150 OR 171, REGISTRATION IN ARCH 241.
3 HOURS

00072	LAB	9-12	MTUWTHFS	206	F A B	STAFF

ARCH 234 ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 233.
3 HOURS

00073	LAB	9-12	MTUWTHFS	206	F A B	STAFF

ARCH 247 STRUCTURAL PLANNING.
PREREQUISITE--ARCH. 257.
3 HOURS

00074	LECT-DISC	10	MTUWTHFS	301	ARCH	HARNISH

COURSES FOR GRADUATES

ARCH 493 SPECIAL PROBLEMS IN STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
*SECTION PS--PRESTRESS, *SECTION PD--PLASTIC DESIGN

00075	CONF	ARR		115	ARCH	COY

ARCH 494 SPECIAL PROBLEMS IN ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 435.
1/2 TO 2 UNITS

00076	LAB	ARR		206	F A B	LOVE

ARCH 496 ARCHITECTURAL HISTORY.
PREREQUISITE--ARCH. 417 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

00077	CONF	ARR		119	ARCH	CONNALLY

DEPARTMENT OFFICE 143 F A B

COURSES IN ART APPRECIATION AND THE HISTORY OF ART

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 315 ART OF THE NINETEENTH CENTURY.
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT.
00078 LECT A 8 MTUWTHFS 62 K M ROOS

STUDIO COURSES PRIMARILY FOR NON-ART STUDENTS

ART 105 INTRODUCTION TO WATER COLOR PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS CREDIT.
*2 HOURS
00079 LAB A 1-5 M W F 209 F A B SHIPLEY

ART 106 INTRODUCTION TO OIL PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
00080 LAB A 9-1 M W F 9 F A B HENNESSEY

ART 107 ELEMENTARY DRAWING.
FOR STUDENTS NOT MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
00081 LAB A 1-5 M W F 236 F A B ARLON

PROFESSIONAL AND STUDIO COURSES

COURSES FOR UNDERGRADUATES

ART 117 DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS
AND IN HOME ECONOMICS OPTION 1.
3 HOURS
00082 LAB A 10-1 MTUWTHFS 370 ARMORY HULT

ART 118 DRAWING, II.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND
IN HOME ECONOMICS OPTION 1.
PREREQUISITE--ART 117.
2 HOURS
00083 LAB A 10-12 MTUWTHFS 372 ARMORY HULT

ART 119 DESIGN, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS
AND IN HOME ECONOMICS OPTION 1.
2 HOURS
00084 LAB A 8-10 MTUWTHFS 311 F A B RAY

ART 120 DESIGN, II.
OPEN ONLY TO STUDENTS IN COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
PREREQUISITE--ART 119.
3 HOURS

00085	LAB	A	7-10	MTUWTHFS	311	F A B		RAY

ART 121 DRAWING THEORY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

00086	LAB	A	2-5	TUWTHF	235	F A B		HAGEN

ART 122 DRAWING THEORY.
PREREQUISITE--ART 121.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

00087	LAB	A	2-5	TUWTHF	235	F A B		HAGEN

ART 125 LIFE DRAWING, I.
PREREQUISITE--ART 118.
2 HOURS

00088	LAB	A	2-5	TUWTHF	336	F A B		MOSES

ART 126 LIFE DRAWING, II.
PREREQUISITE--ART 125.
2 HOURS

00089	LAB	A	2-5	TUWTHF	336	F A B		MOSES

ART 131 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 118, 120.
2 HOURS

00090	LAB	A	9-1	TU TH S	209	F A B		GUNTER

ART 132 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 131.
2 HOURS

00091	LAB	A	9-1	TU TH S	209	F A B		GUNTER

ART 141 STILL LIFE, I.
PREREQUISITE--ART 118, 120.
2 HOURS

00092	LAB	A	9-1	M W F	9	F A B		HENNESSEY

ART 142 STILL LIFE, II.
PREREQUISITE--ART 141.
2 HOURS

00093	LAB	A	9-1	M W F	9	F A B		HENNESSEY

ART 151 SCULPTURE, I.
PREREQUISITE--ART 118, 120, OR ARCH. 234.
2 HOURS

00094	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 152 SCULPTURE, II.
PREREQUISITE--ART 151.
2 HOURS

00095	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 181 FREEHAND DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS.
2 HOURS

00096	LAB	A	1-5	M W F	236	F A B		ARLON

ART 182 FREEHAND DRAWING, II.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS.
PREREQUISITE--ART 181.
2 HOURS

00097	LAB	A	1-5	M W F	236	F A B		ARLON

ART 183 FREEHAND DRAWING, III.
PREREQUISITE--ART 182. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS
00098 LAB A 1-5 M W F 209 F A B SHIPLEY

ART 184 FREEHAND DRAWING, IV.
PREREQUISITE--ART 183. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS
00099 LAB A 1-5 M W F 209 F A B SHIPLEY

ART 190 RECREATIONAL CRAFTS, I.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
00100 LAB A 2-5 TUWTHF 106 F A B BREEN

ART 191 RECREATIONAL CRAFTS, II.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
PREREQUISITE--ART 190.
2 HOURS
00101 LAB A 2-5 TUWTHF 106 F A B BREEN

ART 192 METALWORK AND JEWELRY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
00102 LAB A 2-5 TUWTHF 24 D K H STAFF

ART 193 METALWORK AND JEWELRY, II.
PREREQUISITE--ART 192.
2 HOURS
00103 LAB A 2-5 TUWTHF 24 D K H STAFF

ART 194 POTTERY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
00104 LAB A 9-1 M W F 152 MET LAB TISCHLER

ART 195 POTTERY, II.
PREREQUISITE--ART 194.
2 HOURS
00105 LAB A 9-1 M W F 152 MET LAB TISCHLER

COURSES FOR ADVANCED UNDERGRADUATES

ART 201 WATER COLOR, III.
PREREQUISITE--ART 118 AND ART 120.
2 HOURS
00106 LAB A 1-5 M W F 209 F A B SHIPLEY

ART 202 WATER COLOR, IV.
PREREQUISITE--ART 201.
2 HOURS
00107 LAB A 1-5 M W F 209 F A B SHIPLEY

ART 203 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS
00108 LAB A 2-5 TUWTHF 106 F A B BREEN

ART 204 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS
00109 LAB A 2-5 TUWTHF 106 F A B BREEN

ART 225 INTERMEDIATE DRAWING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS
00110 LAB A 2-5 TUWTHF 338 F A B MOSES

ART 226 INTERMEDIATE DRAWING, II.
PREREQUISITE--ART 225.
2 HOURS

00111	LAB	A	2-5	TUWTHF	338	F A B		MOSES

ART 231 INTERMEDIATE COMPOSITION, I.
PREREQUISITE--ART 132.
3 HOURS

00112	LAB	A	2-6	M W F	308	F A B		SPRAGUE
		A	2-5	TU TH	308	F A B		SPRAGUE

ART 232 INTERMEDIATE COMPOSITION, II.
PREREQUISITE--ART 231.
3 HOURS

00113	LAB	A	2-6	M W F	308	F A B		SPRAGUE
		A	2-5	TU TH	308	F A B		SPRAGUE

ART 243 FIGURE PAINTING, I.
PREREQUISITE--JUNIOR STANDING IN ART
2 HOURS

00114	LAB	A	2-6	M W F	318	F A B		SPRAGUE

ART 244 FIGURE PAINTING, II.
PREREQUISITE--ART 243.
2 HOURS

00115	LAB	A	2-6	M W F	318	F A B		SPRAGUE

ART 251 ADVANCED SCULPTURE, I.
PREREQUISITE--ART 152.
2 HOURS

00116	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 252 ADVANCED SCULPTURE, II.
PREREQUISITE--ART 251.
2 HOURS

00117	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 261 LAYOUT AND LETTERING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

00118	LAB	A	9-12	MTUWTHFS	311	F A B		MOORE

ART 262 LAYOUT AND LETTERING, II.
PREREQUISITE--ART 261.
3 HOURS

00119	LAB	A	9-12	MTUWTHFS	311	F A B		MOORE

ART 265 GRAPHIC DESIGN, I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

00120	LAB	A	9-12	MTUWTHFS	311	F A B		MOORE

ART 266 GRAPHIC DESIGN, II.
PREREQUISITE--ART 265.
3 HOURS

00121	LAB	A	9-12	MTUWTHFS	311	F A B		MOORE

ART 281 FREEHAND DRAWING, V.
PREREQUISITE--ART 184.
2 HOURS

00122	LAB	A	1-5	M W F	311	F A B		PERLMAN

ART 282 FREEHAND DRAWING, VI.
PREREQUISITE--ART 281.
2 HOURS

00123	LAB	A	1-5	M W F	311	F A B		PERLMAN

ART 292 INTRODUCTION TO METAL DESIGN IN JEWELRY.
PREREQUISITE--JUNIOR STANDING IN CURRICULUM IN CRAFTS.
3 HOURS

00124	LAB	A	ARR		24	D K H		STAFF

ART 293 DEVELOPMENT OF METAL DESIGN IN JEWELRY.
PREREQUISITE--ART 292.
3 HOURS
00125 LAB A ARR 24 D K H STAFF

ART 294 CERAMIC DESIGN, I.
PREREQUISITE--JUNIOR STANDING IN CURRICULUM IN CRAFTS.
3 HOURS
00126 LAB A ARR 152 MET LAB TISCHLER

ART 295 CERAMIC DESIGN, II.
PREREQUISITE--ART 294.
3 HOURS
00127 LAB A ARR 152 MET LAB TISCHLER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 332 DRAWING.
PREREQUISITE--ART 126 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE.
2 HOURS, OR 1/2 TO 1 UNIT
00128 LAB A 2-5 TUWTHF 338 F A B MOSES

ART 333 PAINTING.
PREREQUISITE--ART 142 OR EQUIVALENT, FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M. F. A. IN PAINTING.
•COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS.
•2 TO 4 HOURS, OR 1/2 TO 1 UNIT
00129 LAB A 2-6 M W F 318 F A B SPRAGUE

ART 351 ADVANCED SCULPTURE TECHNIQUES.
PREREQUISITE--ART 252 OR EQUIVALENT.
2 HOURS, OR 1/2 TO 1 UNIT
00130 LAB A 9-1 TU TH S 25 F A B STAFF

ART 392 SILVERSMITHING, I.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
00131 LAB A ARR 24 D K H STAFF

ART 393 SILVERSMITHING, II.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
00132 LAB A ARR 24 D K H STAFF

ART 394 CERAMIC DESIGN.
PREREQUISITE--ART 295 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 TO 2 UNITS
00133 LAB A ARR 152 MET LAB TISCHLER

COURSES FOR GRADUATES

ART 491 SPECIAL PROBLEMS.
1/2 TO 2 UNITS
00134 LAB A 2-5 MTUWTH GRAD STUDIO DOOLITTLE

ART 493 SEMINAR.
1 UNIT
00135 CONF A ARR 118 ARCH ROOS

ART 495 PAINTING LABORATORY.
1/2 TO 2 UNITS
00136 LAB A 2-5 MTUWTH GRAD STUDIO DOOLITTLE

ASIAN STUDIES

DEPARTMENT OFFICE 316-1207 W OREGON

STUDENTS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF EAST, SOUTHEAST, SOUTH, AND MIDDLE EAST ASIAN AFFAIRS AND CULTURES ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR AND FACULTY MEMBERS OF THE CENTER FOR ASIAN STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. THE DIRECTOR IS PROFESSOR SOLOMON B. LEVINE, ROOM 316, 1207 W OREGON, U.

BELOW ARE LISTED COURSES IN THE ASIAN STUDIES AREAS WHICH ARE BEING OFFERED THIS TERM. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.

ANTH. 160	ECON. 428
ECON. 228	MUSIC 316

ASTRONOMY

DEPARTMENT OFFICE 108A OBSERV

MAJOR--TWENTY HOURS IN ASTRONOMY.

MINOR--TWENTY HOURS WHICH MUST INCLUDE PHYSICS 106, 107, AND 108. THE REMAINING EIGHT HOURS MAY BE TAKEN IN PHYSICS OR IN ONE OF THE FOLLOWING SUBJECTS--CHEMISTRY, GEOLOGY, MATHEMATICS, PHILOSOPHY. IF TWO SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

INDIVIDUAL INSTRUCTION IS PROVIDED FOR SUPERIOR UNDERGRADUATE STUDENTS AT HOURS TO BE ARRANGED.

COURSES FOR UNDERGRADUATES

ASTR 101 DESCRIPTIVE ASTRONOMY.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN ASTR. 210.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
*ONE EVENING HOUR AT OBSERVATORY--WED 8 PM.

00137	LECT	*9	MTUWTHF	137	ADMIN
00137	DISC	2	TU TH	137	ADMIN

COURSES FOR ADVANCED UNDERGRADUATES

ASTR 210 GENERAL ASTRONOMY.
PREREQUISITE--ONE YEAR OF COLLEGE PHYSICS.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN ASTR. 101 OR ASTR. 102.
*3 HOURS
*ONE EVENING HOUR AT OBSERVATORY--TU 8 PM.

00138	LECT	*11	MTUWTHF	219	G H

AVIATION

DEPARTMENT OFFICE 318 C E H

COURSES OFFERED BY THE INSTITUTE OF AVIATION ARE OPEN TO STUDENTS AND FACULTY IN ALL DEPARTMENTS OF THE UNIVERSITY, SUBJECT TO LIMITATIONS IMPOSED BY THE AVAILABILITY OF SPACE AND EQUIPMENT. CREDIT FOR INSTITUTE OF AVIATION COURSES IS GENERAL UNIVERSITY CREDIT. HOWEVER, ITS USE AS CREDIT TOWARD GRADUATION IS A MATTER FOR EACH COLLEGE TO PASS UPON.

THE FEE FOR EACH INSTITUTE OF AVIATION FLIGHT COURSE IS $375. ARRANGEMENTS FOR THE PHYSICAL EXAMINATION FOR STUDENTS IN AVI. 101 ARE MADE BY THE INSTITUTE THROUGH THE UNIVERSITY HEALTH SERVICE UPON FINAL ACCEPTANCE IN THE PRIVATE PILOT COURSE AT REGISTRATION TIME. STUDENTS IN AVI. 104 ARE REQUIRED TO POSSESS A CURRENT SECOND CLASS F.A.A. MEDICAL CERTIFICATE AT THE TIME OF REGISTRATION.

BUS TRANSPORTATION BETWEEN THE CAMPUS AND AIRPORT IS PROVIDED FREE OF CHARGE TO ALL STUDENTS REGISTERED IN AVIATION COURSES. THE DAILY BUS SCHEDULE, WITH ROUTINGS, IS LISTED SEPARATELY IMMEDIATELY FOLLOWING THE FLIGHT COURSES. STUDENTS MAY PROVIDE THEIR OWN TRANSPORTATION IF THEY WISH.
STUDENTS ARE CAUTIONED THAT ALL TIMES LISTED IN THE FOLLOWING FLIGHT SCHEDULES REFER TO AIRBORNE TIME AND THAT A MINIMUM OF 30 MINUTES MUST BE ALLOWED FOR TRAVELING TO THE AIRPORT PRIOR TO EACH FLIGHT AND FOR RETURNING TO THE CAMPUS AFTER EACH FLIGHT.

COURSES FOR UNDERGRADUATES

IN SOME CASES TWO OR MORE COURSES MAY BE TAKEN CONCURRENTLY BY SPECIAL PERMISSION.

AVI 101 PRIVATE PILOT.
3 HOURS

00139	LECT-DISC	A	9-10	MTUWTHF	423	C E H	HAAK
00140	LECT-DISC	B	3-4	MTUWTHF	423	C E H	MOELLER
00141	FLT	F1	8-9	MTUWTHFS		AIRPORT	BENN AND STAFF
00142	FLT	F2	920-1020	MTUWTHFS		AIRPORT	
00143	FLT	F3	1040-1140	MTUWTHFS		AIRPORT	
00144	FLT	F4	1220-120	MTUWTHF		AIRPORT	
00145	FLT	F5	140-240	MTUWTHF		AIRPORT	
00146	FLT	F6	3-4	MTUWTHF		AIRPORT	
00147	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 102 SECONDARY FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

00148	LECT-DISC		10-11	MTUWTHF	423	C E H	HAAK
00149	FLT	F1	8-9	MTUWTHFS		AIRPORT	GORDON
00150	FLT	F4	1220-120	MTUWTHF		AIRPORT	AND STAFF
00151	FLT	F5	140-240	MTUWTHF		AIRPORT	
00152	FLT	F6	3-4	MTUWTHF		AIRPORT	
00153	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 103 INTERMEDIATE FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

00154	LECT-DISC		12-1	MTUWTHF	423	C E H	HAAK
00155	FLT	X1	745-1130	M TH		AIRPORT	GORDON
00156	FLT	X2	140-540	M TH		AIRPORT	AND STAFF
00157	FLT	X3	745-1130	TU F		AIRPORT	
00158	FLT	X4	140-540	TU F		AIRPORT	
00159	FLT	X5	745-1130	W S		AIRPORT	

AVI 104 ADVANCED FLIGHT.
PREREQUISITE--AVI. 102 AND 103, CONSENT OF DIRECTOR.
3 HOURS

00160	LECT-DISC	A	11-12	MTUWTHF	423	C E H	MOELLER
00161	LECT-DISC	B	1-2	MTUWTHF	423	C E H	MOELLER
00162	FLT	F1	8-9	MTUWTHFS		AIRPORT	GORDON
00163	FLT	F2	920-1020	MTUWTHFS		AIRPORT	AND STAFF
00164	FLT	F3	1040-1140	MTUWTHFS		AIRPORT	
00165	FLT	F4	1220-120	MTUWTHF		AIRPORT	
00166	FLT	F5	140-240	MTUWTHF		AIRPORT	
00167	FLT	F6	3-4	MTUWTHF		AIRPORT	
00168	FLT	F7	430-530	MTUWTHF		AIRPORT	

COURSES FOR ADVANCED UNDERGRADUATES

AVI 205 FLIGHT INSTRUCTOR.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

00169	LECT-DISC		10-11	MTUWTHF	421	C E H	MOELLER
00170	FLT	F1	8-9	MTUWTHFS		AIRPORT	ANDERSON
00171	FLT	F4	1220-120	MTUWTHF		AIRPORT	AND STAFF
00172	FLT	F5	140-240	MTUWTHF		AIRPORT	
00173	FLT	F6	3-4	MTUWTHF		AIRPORT	
00174	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 206 BASIC INSTRUMENT FLIGHT TECHNIQUES.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, OR EQUIVALENT FLIGHT EXPERIENCE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

00175	LECT-DISC		745-845	MTUWTHF	423	C E H	HAAK
00176	FLT	F2	920-1020	MTUWTHFS		AIRPORT	ANDERSON
00177	FLT	F3	1040-1140	MTUWTHF		AIRPORT	AND STAFF
00178	FLT	F4	1220-120	MTUWTHF		AIRPORT	
00179	FLT	F5	140-240	MTUWTHF		AIRPORT	
00180	FLT	F6	3-4	MTUWTHF		AIRPORT	
00181	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 292 SPECIAL RATING--MULTI-ENGINE LAND.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, CONSENT OF DIRECTOR.
1 HOUR

00182	DISC		ARR		AIRPORT	ANDERSON
00183	FLT	F1	8-9	MTUWTHFS	AIRPORT	ANDERSON
00184	FLT	F2	920-1020	MTUWTHFS	AIRPORT	AND STAFF
00185	FLT	F3	1040-1140	MTUWTHFS	AIRPORT	
00186	FLT	F4	1220-120	MTUWTHF	AIRPORT	
00187	FLT	F5	140-240	MTUWTHF	AIRPORT	
00188	FLT	F6	3-4	MTUWTHF	AIRPORT	
00189	FLT	F7	430-530	MTUWTHF	AIRPORT	

BUS SCHEDULE AND ROUTE

THE INSTITUTE OF AVIATION BUS MAKES REGULAR TRIPS BETWEEN THE AIRPORT AND THE CAMPUS BEGINNING ON THE FIRST DAY OF CLASSES AND CONTINUING THROUGH THE LAST DAY OF FINAL EXAMINATIONS. THE BUS LEAVES FROM THE CAMPUS PARKING LOCATION AT THE NORTH EAST CORNER OF AERO LAB B, AND MAKES REGULAR STOPS ON THE WAY TO THE AIRPORT AT THE CORNERS OF SIXTH AND ARMORY STREETS, FOURTH STREET AND GREGORY DRIVE, AND FIRST STREET AND GREGORY DRIVE. THE TRIP FROM THE AIRPORT BACK TO THE CAMPUS IS VIA GREGORY DRIVE AND GOODWIN AVENUE TO THE PARKING LOCATION. THE SCHEDULE IS AS FOLLOWS--

MONDAY-WEDNESDAY-FRIDAY

LEAVE CAMPUS-ARRIVE AIRPORT			LEAVE AIRPORT-ARRIVE CAMPUS		
SECT.			SECT.		
A1	7.30	8.00	C1	8.30	9.00
A2	9.00	9.30	C2	9.30	10.00
A3	10.00	10.30	C3	11.00	11.30
A4	12.00	12.30PM	C4	12.30PM	1.00PM
A5	1.00PM	1.30	C5	1.30	2.00
A6	2.00	2.30	C6	2.30	3.00
A7	3.00	3.30	C7	3.30	4.00
A8	4.00	4.30	C8	5.00	5.30
A9	5.30	6.00			

TUESDAY-THURSDAY-SATURDAY

SECT.			SECT.		
A10	7.30	8.00	C9	8.30	9.00
A11	9.00	9.30	C10	9.30	10.00
A12	10.00	10.30	C11	11.00	11.30
A13	12.00	12.30PM	*C12	12.30PM	1.00PM
*A14	1.00	1.30	C13	1.30	2.00
A15	2.00	2.30	C14	2.30	3.00
A16	3.00	3.30	C15	3.30	4.00
A17	4.00	4.30	C16	5.30	6.00
A18	6.00	6.30			

NOTE-- 1. ASTERISK DENOTES LAST TRIP ON SATURDAYS.

AVIATION
AIRCRAFT MAINTENANCE

AVI 161 AIRPORT SHOP MANAGEMENT.
3 HOURS
00190 LECT-DISC 920-1010 MTUWTHF AIRPORT BAILEY

AVI 168 PROBLEMS OF AIRCRAFT MAINTENANCE.
PREREQUISITE--SOPHOMORE STANDING.
2 HOURS
00191 LECT-DISC 8-10 TU F AIRPORT APPLEGATE

BANDS

DEPARTMENT OFFICE 140 BAND

THE SUMMER SESSION BAND IS OPEN TO STUDENTS WHO HAVE BEEN MEMBERS OF THE UNIVERSITY BANDS DURING THE ACADEMIC YEAR, AND TO OTHER STUDENTS, BOTH MEN AND WOMEN, WHO MAY QUALIFY BY PLAYING EXAMINATION. FINAL SELECTION OF MEMBERSHIP IS BY INSTRUMENTATION AND PROFICIENCY. CANDIDATES SHOULD REPORT TO THE BANDS OFFICE, 140 BAND BUILDING, DURING THE REGISTRATION PERIOD FOR ENROLLMENT AND/OR APPOINTMENTS FOR AUDITIONS. REHEARSALS WILL BE HELD FROM 7.15 TO 8.45 P.M. MONDAY AND WEDNESDAY IN ROOM 141, BAND BUILDING, AND A SERIES OF TWILIGHT CONCERTS WILL BE SCHEDULED. CONDUCTOR--MR. GUY DUKER

00192 PRACT 715-845PM M W BAND

BIOLOGY

DEPARTMENT OFFICE 404 N H B

COURSES FOR ADVANCED UNDERGRADUATES

BIOL 490 SPECIAL TOPICS IN BIOLOGY.
1/2 TO 1 UNIT OF CREDIT
00193 CONF ARR STAFF

BIOL 499 THESIS RESEARCH.
0 TO 4 UNITS
00194 CONF ARR STAFF

BIOPHYSICS

DEPARTMENT OFFICE 524 BUR HALL

COURSES FOR GRADUATES

BIOPH 410 SPECIAL TOPICS IN BIOPHYSICS.
PREREQUISITE--BIOPH. 401 OR EQUIVALENT, BIOPH. 402 AND 403.
1/2 TO 1 UNIT
00195 CONF ARR STAFF

BIOPH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00196 CONF ARR STAFF

BOTANY

DEPARTMENT OFFICE 208 N H B

MAJOR--TWENTY HOURS OF BOTANY EXCLUDING BOTANY 100, 101, D.G.S. 131, AND 132, BUT INCLUDING BOT. 160, 302,303, AND 330 OR THEIR EQUIVALENT. THE BALANCE OF THE MINIMUM OF TWENTY HOURS MUST BE TAKEN IN OTHER 300 LEVEL COURSES. BOT. 210 AND 381 ARE STRONGLY RECOMMENDED. IN ADDITION ONE SEMESTER EACH OF ORGANIC CHEMISTRY, PHYSICS AND ZOOLOGY WILL BE REQUIRED. ONE ADDITIONAL SEMESTER OF PHYSICAL SCIENCE IS ALSO REQUIRED, BUT THIS MAY BE SELECTED FROM COURSES IN PHYSICS OR GEOLOGY. CREDIT NOT TO EXCEED TWO HOURS IN BIOL. 203 AND 204 MAY BE INCLUDED IN THE TWENTY HOURS OF CREDIT FOR THE MAJOR.

MINORS--TWENTY HOURS IN ONE OR TWO SUBJECTS CHOSEN IN CONSULTATION WITH THE CHAIRMAN OF THE DEPARTMENT FROM THE FOLLOWING--AGRONOMY, CHEMISTRY, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, HORTICULTURE, MATHEMATICS MICROBIOLOGY, PHYSICS, PHYSIOLOGY, PLANT PATHOLOGY, AND ZOOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

IF HORTICULTURE IS CHOSEN AS A MINOR, NOT MORE THAN TEN HOURS MAY BE COUNTED. THE TEN HOURS MAY BE CHOSEN FROM HORT. 100, 110, 121, 201, 230 OR 233, 242, 262, 307 OR 308, 321 OR 322, 367, AND 382.

NOTE--ATTENTION IS CALLED TO ADDITIONAL COURSE OFFERINGS LISTED UNDER BIOLOGY.

COURSES FOR UNDERGRADUATES

BOT 100 GENERAL BOTANY.
*CREDIT IS NOT GIVEN IN BOT. 100 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

00197	LECT	9	MTUWTHF	259	N H B	BALBACH
00197	LAB	10-12	MTUWTHF	259	N H B	BALBACH

COURSES FOR ADVANCED UNDERGRADUATES

BOT 210 GENETICS.
SAME AS ZOOL. 210
PREREQUISITE--BOT. 100 AND ZOOL. 101 OR CONSENT OF INSTRUCTOR.
4 HOURS

00198	LECT	2	MTUWTHF	140	BUR HALL	BADER
00198	LAB-DISC	3	MTUWTHF	314	N H B	TENCZAR

BOT 293 HONORS.
PREREQUISITE--FIFTEEN HOURS OF BOTANY, SENIOR STANDING.
2 HOURS

00199	CONF	&	ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

BOT 300 INDIVIDUAL TOPICS.
PREREQUISITE--BOT. 100, TEN HOURS OF ADVANCED WORK IN BOTANY OR ANOTHER BIOLOGICAL SCIENCE, SENIOR STANDING.
*GRADUATE STUDENTS MAY OFFER 1 UNIT TOWARD M. S.
*2 TO 5 HOURS, OR 1/4 OR 1/2 UNIT

00200	CONF		ARR			STAFF

BOT 304 GENERAL PLANT MORPHOLOGY.
PREREQUISITE--BOT. 100 OR D.G.S. 131 AND 132, OR EQUIVALENT, SENIOR STANDING OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN BOT. 302 OR BOT. 303
*3 OR 5 HOURS, OR 1/2 OR 1 UNIT
00201 LAB-DISC 8-10 MTUWTHFS 201 H H STAFF

BOT 306 BIOLOGY FOR TEACHERS.
SAME AS ZOOL. 306.
ADJUSTED TO PRACTICE TEACHING.
PREREQUISITE--BOT. 100, ZOOL. 101 OR 104, OR A ONE-YEAR COURSE IN GENERAL BIOLOGY, JUNIOR STANDING, EXPECTATION OF TEACHING.
3 HOURS, OR 1/2 UNIT
*FOUR ADDITIONAL CLASS MEETINGS TO BE ARRANGED.
00202 LAB-DISC 10-12 MTUWTHF 153 N H B REED
FRANKENBERG

BOT 366 FIELD BOTANY.
PREREQUISITE--ONE COURSE IN BOTANY, CONSENT OF INSTRUCTOR.
3 OR 5 HOURS, OR 1/2 OR 1 UNIT
FIELD WORK TWO HOURS TO BE ARRANGED
00203 LAB-DISC 1-3 MTUWTHF 258 N H B PAYNE

COURSES FOR GRADUATES

BOT 493 ADVANCED STUDIES IN BOTANY.
* NOT MORE THAN 1 UNIT MAY BE APPLIED TOWARD THE GRADUATE COLLEGE M.S. DEGREE REQUIREMENT OF 3 UNITS OF COURSE WORK.
*1/2 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--

A--ANATOMY--PLANT	CAROTHERS, PAOLILLO
B--CYTOGENETICS	STEFFENSEN
C--CYTOLOGY	STEFFENSEN
D--ECOLOGY--PLANT	BLISS
E--GENETICS--PLANT	LAUGHNAN
F--MORPHOLOGY--HIGHER VASCULAR PLANTS	CAROTHERS, PAOLILLO
G--MORPHOLOGY--PRIMITIVE VASCULAR PLANTS	STEWART
H--MYCOLOGY	ROGERS
I--PALEOBOTANY	STEWART, PHILLIPS
J--PHOTOSYNTHESIS	RABINOWITCH, GOVINDJEE
K--PHYCOLOGY	HOFFMAN
L--PHYSIOLOGY--PLANT	NANCE, STERN
M--TAXONOMY OF BRYOPHYTES	JONES
N--TAXONOMY OF VASCULAR PLANTS	JONES, PAYNE
O--VIROLOGY--PLANT	BLACK

00204 LAB ARR STAFF

BOT 499 THESIS RESEARCH.
FIELD TRIPS--TWO 4-HOUR TRIPS ON SATURDAY.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00205 LAB ARR STAFF

BUSINESS

DEPARTMENT OFFICE 350 COM W

COURSES FOR GRADUATES

BUS 499 THESIS RESEARCH
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00206 CONF 1-3 W 160 COM W DEMARIS

BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION--214 DAVID KINLEY HALL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ADM 373 ELECTRONIC DATA PROCESSING FOR BUSINESS.
PREREQUISITE--ECON. 170, ACCY. 106 OR 108.
3 HOURS, OR 1/2 OR 1 UNIT
00207 DISC E 1-220 MTU THF 240 COM W

COURSES FOR GRADUATES

B ADM 511 BUSINESS ORGANIZATION.
PREREQUISITE--B. ADM. 510.
3/4 UNIT
00208 DISC 8-10 MTU THF 241 COM W BALIGH

B ADM 520 MARKETING.
PREREQUISITE--REGISTRATION IN THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT
00209 DISC 10-12 MTU THF 241 COM W VOLPP

B ADM 531 INTRODUCTION TO PRODUCTION.
PREREQUISITE--FIRST SEMESTER OF THE M. B. A. PROGRAM.
3/4 UNIT
00210 DISC 10-12 MTU THF 91 COM W RICHARTZ

B ADM 544 EXECUTIVE POLICIES AND PLANNING.
PREREQUISITE--FIRST YEAR MASTER OF BUSINESS ADMINISTRATION COURSES OR EQUIVALENT.
1 UNIT
00211 DISC 8-10 MTU THF 91 COM W SLATE

B ADM 590 INDEPENDENT STUDY AND RESEARCH.
1/2 OR 1 UNIT
00212 CONF 1-3 MTU THF 241 COM W

B ADM 599 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00213 CONF 3-5 MTU THF 241 COM W

BUSINESS EDUCATION

DEPARTMENT OFFICE 9 D K H

COURSES FOR UNDERGRADUATES

NOTE--COMMERCE UNDERGRADUATES MAY RECEIVE CREDIT IN B. ED. 101, 102, 111, AND 112 IF REGISTERED IN THE CURRICULUM IN SECRETARIAL TRAINING OR COMMERCIAL TEACHING. STUDENTS NOT MAJORING IN SECRETARIAL TRAINING OR COMMERCIAL TEACHING SHOULD CHECK WITH THEIR COLLEGE OFFICES FOR THE CREDIT ALLOWED FOR THESE COURSES.

COURSES FOR ADVANCED UNDERGRADUATES

NOTE--COMMERCE UNDERGRADUATE MAY RECEIVE CREDIT IN B.ED. 203 AND 213 IF REGISTERED IN THE CURRICULUM IN SECRETARIAL TRAINING OR COMMERCIAL TEACHING. STUDENTS NOT MAJORING IN SECRETARIAL TRAINING OR COMMERCIAL TEACHING SHOULD CHECK WITH THEIR COLLEGE OFFICE FOR THE CREDIT ALLOWED FOR THESE COURSES.

B ED 352 IMPROVEMENT OF INSTRUCTION IN TYPEWRITING.
PREREQUISITE--SIXTEEN HOURS IN COMMERCE, INCLUDING B. ED. 203 AND SIXTEEN HOURS IN EDUCATION, INCLUDING ED. PR. 242.
2 HOURS, OR 1/2 UNIT
*SECTION A MEETS THE FIRST FOUR WEEKS

00214	LECT-DISC	*A	10-12	TUWTHF	10	D K H	REED

B ED 383 PROBLEMS IN COOPERATIVE EDUCATION.
PREREQUISITE--SIXTEEN HOURS IN EDUCATION AND SIXTEEN IN COMMERCE, AND CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT
THIS IS AN EXTRAMURAL COURSE--PROBLEMS IN COOPERATIVE EDUCATION STUDENTS APPLY FOR AND SECURE DISTRIBUTIVE OR OFFICE POSITIONS WITH SELECTED COOPERATING BUSINESS FIRMS. WHILE REGULARLY EMPLOYED IN THESE SUPERVISED POSITIONS, THEY OBSERVE THE RELATIONSHIPS BETWEEN THOSE ACTIVITIES AND THE COOPERATIVE BUSINESS EDUCATION PROGRAMS IN THE HIGH SCHOOL. THESE RELATIONSHIPS ARE POINTED UP THROUGH WORKSHOP SESSIONS WHERE EMPHASIS IS PLACED ON JOB ANALYSIS, CURRENT TRENDS, WAGE AND BENEFIT STRUCTURE, PERSONNEL PRACTICES, AND LABOR RELATIONS. THESE WORKSHOP SESSIONS MEET DURING THE FIRST AND LAST WEEK OF THE SUMMER SESSION IN THE INDICATED ROOM.

00215	LECT-DISC		1-5	MTUWTHF	15	D K H	ROSS

COURSES FOR GRADUATES

SEE VO TEC 456--BUSINESS EDUCATION SECTION, SEC. B
SEE VO TEC 459--AUTOMATION SECTION, SEC. C

B ED 490 SPECIAL TOPICS.
*CREDIT CANNOT BE APPLIED TO A DEGREE IF A THESIS IS SUBMITTED.
*1/2 OR 1 UNIT

00216	CONF		ARR			D K H	

BUSINESS LAW

DEPARTMENT OFFICE 350 COM W

COURSES FOR UNDERGRADUATES

B LAW 100 BASIC PRINCIPLES OF BUSINESS LAW.
PREREQUISITE--ACCY. 105, ECON. 102, FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN FOR B. LAW 201 OR 261 IN ADDITION TO B. LAW
*3 HOURS
*HONORS SECTION OPEN TO JAMES SCHOLARS AND OTHER HONORS STUDENTS.

00217	LECT-DISC	A	8	MTUWTHF	240	COM W	CORLEY
		A	3	M	240	COM W	CORLEY

COURSES FOR ADVANCED UNDERGRADUATES

B LAW 261 SUMMARY OF BUSINESS LAW.
FOR NON-COMMERCE STUDENTS WHO HAVE AT LEAST JUNIOR STANDING.
*CREDIT IS NOT GIVEN FOR B. LAW. 261 IN ADDITION TO B. LAW. 100 OR 201.
*3 HOURS

00218	LECT-DISC	A	8	MTUWTHF	240	COM W	CORLEY
		A	3	M	240	COM W	CORLEY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B LAW 301 THE LAW OF SECURITY TRANSACTIONS AND BANKING.
PREREQUISITE--SENIOR STANDING, B. LAW. 100, OR CREDIT OR REGISTRATION IN B. LAW. 202.
3 HOURS, OR 3/4 OR 1 UNIT

00219	LECT-DISC	C	10	MTUWTHF	240	COM W	CORLEY
		C	3	W	240	COM W	CORLEY

CERAMIC ENGINEERING

DEPARTMENT OFFICE 203 CER

COURSES FOR ADVANCED UNDERGRADUATES

CER E 299 THESIS.
1 TO 3 HOURS

00220	LAB-DISC	ARR

COURSES FOR GRADUATES

CER E 495 MATERIALS AND SPECIAL PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 2 UNITS

00221	CONF	ARR

CER E 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00222	CONF	ARR

CHEMISTRY AND CHEMICAL ENGINEERING

DEPARTMENT OFFICE 108 N L

MAJOR--NOT LESS THAN TWENTY HOURS IN CHEMISTRY, EXCLUDING CHEM. 101, 102, 104, 105, 107, 108, 109, AND 111. ONE SEMESTER OF BASIC WORK IN EACH OF THE FOLLOWING AREAS MUST BE INCLUDED--QUANTITATIVE ANALYSIS, ORGANIC, AND PHYSICAL. IN ADDITION, THERE MUST BE INCLUDED TWO APPROVED 300 LEVEL COURSES, ONE IN EACH OF TWO AREAS OF CHEMISTRY. THESE TWO COURSES MUST HAVE THE APPROVAL OF THE DEPARTMENTAL ADVISER. IT IS VERY DESIRABLE THAT THE STUDENT PLAN HIS COURSE WORK AS EARLY AS POSSIBLE IN CONSULTATION WITH HIS ADVISOR.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CERAMIC ENGINEERING, ENTOMOLOGY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHILOSOPHY, PHYSICS, PHYSIOLOGY, PSYCHOLOGY, AND ZOOLOGY. WITH THE WRITTEN APPROVAL OF THE DEPARTMENTAL ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED.

DEPARTMENTAL DISTINCTION--STUDENTS IN CHEMISTRY REGISTERED IN CHEM. 290--THESIS--OR STUDENTS IN CHEMICAL ENGINEERING REGISTERED IN CH. E. 290--THESIS--OR 379--PROJECTS--OR 381--PLANT DESIGN--BECOME CANDIDATES FOR DEPARTMENTAL DISTINCTION. ALL STUDENTS ARE ELIGIBLE FOR COLLEGE HONORS WHO HAVE A 4.0 AVERAGE OR BETTER. THE LEVEL OF DISTINCTION TO BE RECOMMENDED IS DETERMINED BY THE QUALITY OF THE SPECIAL WORK DONE IN ADDITION TO THE REQUIREMENT THAT THE OVER-ALL GRADE-POINT AVERAGES, EXCLUSIVE OF MILITARY TRAINING AND PHYSICAL EDUCATION, OF A 4.0, 4.25, AND 4.5 ARE REQUIRED FOR THE CITATIONS OF DISTINCTION, HIGH DISTINCTION, AND HIGHEST DISTINCTION, RESPECTIVELY RECOMMENDATION IS MADE TO THE DEAN OF THE COLLEGE BY THE HEAD OF THE DEPARTMENT.

SEQUENCE OF COURSES--STUDENTS IN THE CURRICULUM IN CHEMISTRY, MAJORS IN CHEMISTRY, AND ALL OTHERS WHO DESIRE A THOROUGH TRAINING IN THE FUNDAMENTALS OF CHEMISTRY AND THEIR APPLICATIONS TO MODERN LIFE SHOULD SELECT COURSES FROM THE FOLLOWING, USUALLY IN THE SEQUENCE GIVEN--CHEM. 107, 108, 234, 336, 342, 343, 344, 345, 321, 315, AND COURSES IN BIOCHEMISTRY, CHEMICAL ENGINEERING, ANALYTICAL, INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY. STUDENTS WHO DO NOT MEET THE REQUIREMENTS OF PREVIOUS HIGH SCHOOL CHEMISTRY AND THE THOROUGH MATHEMATICS BACKGROUND NECESSARY FOR REGISTRATION IN CHEM. 107, MAY REGISTER IN CHEM. 101 OR 102 BEFORE TAKING THE SEQUENCE CHEM. 107 AND 108. STUDENTS IN THE COLLEGE OF ENGINEERING--EXCEPT CERAMISTS, CERAMIC ENGINEERS, AND THOSE WHO WISH TO TAKE CHEM. 342--SHOULD REGISTER IN CHEM. 101 OR 102, 104, 123, OR IN 109 AND 123.

STUDENTS WHO WISH TO SATISFY A LIMITED CHEMISTRY REQUIREMENT MAY REGISTER FOR THE SEQUENCE CHEM. 101 OR 102, 105, 122, 132, OR 133. STUDENTS WITH EXCEPTIONALLY GOOD RECORDS MAY TAKE 109 INSTEAD OF 102 AND 105.

RESTRICTIONS--STUDENTS IN THE CURRICULA OF CHEMISTRY OR CHEMICAL ENGINEERING MUST HAVE AT LEAST A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, IN ORDER TO BE ACCEPTED BY THE DEPARTMENT AS JUNIORS OR SENIORS. A TRANSFER STUDENT TO BE ACCEPTED MUST HAVE A CORRESPONDING RECORD IN THE INSTITUTION OR INSTITUTIONS FROM WHICH HE TRANSFERS AND MUST MAINTAIN A SIMILAR AVERAGE AT THE UNIVERSITY OF ILLINOIS. WITH THE EXCEPTION OF STUDENTS IN THE COLLEGE OF ENGINEERING AND THE COLLEGE OF AGRICULTURE, REGISTRATION OF STUDENTS IN CHEMISTRY COURSES EXCEPT THOSE OF FRESHMAN AND SOPHOMORE GRADE, NAMELY, CHEM. 101, 102, 104, 105, 107, 108, 109, 111, 122, 123, 132, 133, NORMALLY IS RESTRICTED TO STUDENTS HAVING A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, OR AN AVERAGE OF AT LEAST 3.5 IN HIS CHEMISTRY COURSES. ANY JUNIOR OR SENIOR WHO CANNOT MEET EITHER OF THESE REQUIREMENTS MUST PETITION FOR ADMITTANCE AS A MAJOR OR MINOR IN CHEMISTRY.

BIOCHEMISTRY--STUDENTS WHO WISH TO SPECIALIZE IN BIOCHEMISTRY ARE DIRECTED TO THE CHEMISTRY CURRICULUM OR TO A STRONG CHEMISTRY MAJOR PROGRAM. SUCH STUDENTS SHOULD PLAN THEIR PROGRAMS SO AS TO INCLUDE, IN ADDITION TO CHEMISTRY AND BIOCHEMISTRY, BASIC COURSES IN MATHEMATICS, THROUGH CALCULUS, AND PHYSICS, THROUGH PHYSICS 108, AND A YEAR OF ADVANCED UNDERGRADUATE BIOLOGY. STUDENTS IN RELATED FIELDS WISHING TO TAKE UNDERGRADUATE COURSES IN BIOCHEMISTRY ARE URGED TO PLAN THEIR PROGRAMS SO AS TO PROVIDE AN EQUIVALENT BACKGROUND. STUDENTS ARE ENCOURAGED TO DISCUSS THEIR PROGRAMS WITH THE STAFF OF THE DIVISION OF BIOCHEMISTRY OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING.

COURSES FOR UNDERGRADUATES

CHEM 101 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL PHYSICS, OR TWO AND ONE-HALF UNITS OF HIGH SCHOOL MATHEMATICS, OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

00223	LECT	2	MTUWTH	138	ADMIN	
00223	QUIZ	1	MTUWTH	138	ADMIN	
00223	LAB	10-12	MTUWTH	201	C A	

CHEM 102 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL CHEMISTRY OR EQUIVALENT, 2 1/2 UNITS OF HIGH SCHOOL MATHEMATICS OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE 2 HOURS CREDIT.
*3 HOURS

00224	LECT	2	MTUWTH	138	ADMIN	
00224	QUIZ	1	MTUWTH	137	ADMIN	
00224	LAB	10-12	TU TH	201	C A	

CHEM 122 ELEMENTARY QUANTITATIVE ANALYSIS.
FOR ALL STUDENTS IN HOME ECONOMICS AND PREMEDICAL COURSES AND ALL OTHERS WHO HAVE NOT FOLLOWED THE SEQUENCE CHEM. 101 OR 102, 107 AND 108.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

00225	LECT	11	MTU THF	111	N L	
00225	QUIZ	11	W S	111	N L	
00225	LAB	8-11	MTUWTHFS	301	C A	

CHEM 123 QUANTITATIVE ANALYSIS FOR ENGINEERS.
PREREQUISITE--CHEM. 104, 105, OR 109.
3 HOURS

00226	LECT	11	MTU THF	111	N L	
00226	QUIZ	11	W S	111	N L	
00226	LAB	8-11	MTUWTHFS	301	C A	

CHEM 132 ELEMENTARY ORGANIC CHEMISTRY.
PREREQUISITE--CHEM. 101, 102, 109, OR EQUIVALENT.
3 HOURS
*EACH QUIZ LIMITED TO 21 STUDENTS.

00227	LECT	8	TUWTHF	161	N L	PIRKLE
00227	QUIZ	1	TU TH	161	N L	
00227	LAB	2-5	TU TH	467	N L	

CHEM 133 ELEMENTARY ORGANIC CHEMISTRY.
FOR STUDENTS IN AGRICULTURAL SCIENCE, DAIRY TECHNOLOGY, FOOD TECHNOLOGY, NUTRITION, DIETETICS, AND PREMEDICAL, PREDENTAL AND PREVETERINARY COURSES. PREREQUISITE--CHEM. 105 OR 109.
5 HOURS
*EACH CONFERENCE AND LABORATORY LIMITED TO 63 STUDENTS.

00228	LECT	9	MTU THF	112	C A	BRADY
00228	QUIZ	9	W S	112	C A	
00228	CONF	1	W F	103	N L	
00228	LAB	2-5	W F	467	N L	
		1-5	M	467	N L	

CHEM 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMISTRY CURRICULUM
PREREQUISITE--MAJORS IN CHEMISTRY IN THE GENERAL CURRICULUM MAY REGISTER IF THEY HAVE COMPLETED A MINIMUM OF TWENTY-THREE HOURS OF CHEMISTRY, WHICH MUST INCLUDE AT LEAST FIVE HOURS FROM THE COURSES FOR ADVANCED UNDERGRADUATES. OTHER STUDENTS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT WHO DESIRES TO DO RESEARCH MUST RECEIVE SPECIAL WRITTEN PERMISSION FROM THE INSTRUCTOR UNDER WHOM HE WISHES TO WORK. SUCH WRITTEN PERMISSION SHOULD BE PRESENTED, AT THE TIME OF REGISTRATION, TO THE ADVISER FOR THE CHEMISTS. EACH STUDENT TAKING THIS COURSE MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. IN ORDER TO RECEIVE CREDIT A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CHEM. 290.
2 TO 6 HOURS

00229	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CHEM 315 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN PHYSICAL CHEMISTRY.
3 HOURS, OR 3/4 UNIT

00230	LECT	D	11	MTUWTHF	138	ADMIN
		D	4	TU	138	ADMIN

CHEM 316 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN CHEM. 315.
2 HOURS, OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

00231	CONF		4	TH	138	ADMIN
00231	LAB		*1-4	M F	305	N L

CHEM 321 CHEMICAL AND INSTRUMENTAL ANALYSIS.
PREREQUISITE--CHEM. 336, AND 340 OR 342 WITH CONCURRENT REGISTRATION IN CHEM. 343 AND 344.
5 HOURS, OR 3/4 OR 1 1/4 UNITS

00232	LECT		8	MTUWTHFS	162	N L
00233	LAB	A	9-12	MTUW	315	N L
		A	1-5	MTU	315	N L
00234	LAB	B	1-4	W	315	N L
		B	9-12	THF	315	N L
		B	1-5	THF	315	N L

CHEM 342 PHYSICAL CHEMISTRY.
PREREQUISITE--CHEM. 108, 122, 123, OR EQUIVALENT, PHYCS. 106, 107, AND 108, OR TWO SEMESTERS OF GENERAL PHYSICS WITH CONCURRENT REGISTRATION IN THE THIRD SEMESTER, CREDIT OR REGISTRATION IN MATH 142 OR EQUIVALENT. STUDENTS SHOULD NOT REGISTER IN 342 WHO DO NOT INTEND TO ENROLL IN 344.
3 HOURS, OR 3/4 UNIT

00235	LECT	9	MTUWTHFS	161	N L

CHEM 343 PHYSICAL CHEMISTRY LABORATORY, I.
PREREQUISITE--CHEM. 342.
1 HOUR, OR 1/4 UNIT

00236	LAB	ARR		124	N L

CHEM 345 PHYSICAL CHEMISTRY LABORATORY, II.
PREREQUISITE--CHEM. 342, CREDIT OR REGISTRATION IN CHEM. 343 AND 344.
1 HOUR, OR 1/4 UNIT

00237	LAB	ARR		116	N L

CHEM 350 GENERAL BIOCHEMISTRY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY AND CHEM. 133 OR 234, OR EQUIVALENTS.
3 HOURS, OR 3/4 UNIT

00238	LECT	8	MTUWTHFS	115	E C

CHEM 355 BIOCHEMISTRY LABORATORY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY, CHEM. 133 OR 234, OR EQUIVALENT, REGISTRATION IN CHEM. 350.
3 HOURS, OR 3/4 UNIT
00239 LAB 9-12 MTUWTHF 318 E C

CHEM 397 RADIOCHEMISTRY.
SAME AS NUC. E. 397.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR ONE SEMESTER OF ATOMIC PHYSICS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
*ADDITIONAL HOUR TO BE ARRANGED.
00240 LECT *10 MTUWTHF 137 ADMIN

CHEM 398 RADIOCHEMISTRY LABORATORY.
SAME AS NUC. E. 398.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR ONE SEMESTER OF ATOMIC PHYSICS OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
00241 CONF 1 TU 162 N L
00241 LAB 2-5 TU TH 20 N L

COURSES FOR GRADUATES

CHEM 404 ADVANCED INORGANIC CHEMISTRY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN A 400 LEVEL LECTURE COURSE IN INORGANIC CHEMISTRY.
1/4 OR 3/4 UNIT
00242 LAB ARR 305 N L

CHEM 435 ORGANIC CHEMISTRY SEMINAR.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 UNIT
00243 LECT-DISC 10 M W F 138 ADMIN GRIFFIN

CHEM 449 SPECIAL TOPICS IN PHYSICAL CHEMISTRY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE CREDIT.
*1/2 OR 1 UNIT
00244 LECT 10 MTUWTHF 115 E C

CHEM 455 BIOCHEMISTRY SEMINAR.
REQUIRED OF GRADUATE STUDENTS WHOSE MAJOR IS BIOCHEMISTRY.
PREREQUISITE--CHEM. 350 AND 355, OR EQUIVALENT.
1/2 UNIT
00245 LECT-DISC 10-12 TU TH 116 E C

CHEM 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS, SUBJECT TO THE APPROVAL OF ONE OF THE QUALIFIED STAFF MEMBERS-

ANALYTICAL CHEMISTRY . . .BROWNLEE, HARTLEY, JUVET, LAITINEN, MALMSTADT, PFLUGER

BIOCHEMISTRY . . . CARTER, CLARK, CONRAD, GUNSALUS, HAGER, HASTINGS, RUTTER, SPIEGELMAN, SCHROEPFER, C TODD, WEBER, WOLD.

BIOPHYSICAL CHEMISTRY . . . BLOOMFIELD, HASTINGS, VAN HOLDE, WEBER, WOLD, WOODY.

INORGANIC CHEMISTRY . . . BAILAR, BROWN, DRAGO, KAY, MOELLER, PIPER, STUCKY, L. TODD

ORGANIC CHEMISTRY . . . APPLEQUIST, BALDWIN, BEAK, CURTIN, LEONARD, MARTIN, PIRKLE, RINEHART, SMITH, SNYDER

PHYSICAL CHEMISTRY . BELFORD, BLOOMFIELD, DRICKAMER, FLYGARE, GOODISMAN, GUTOWSKY, HUMMEL, MARCUS, PAUL, SECREST, SIM, VANHOLDE, WOODY, YANKWICH

APPLIED ELECTROCHEMISTRY--ORGANIC AND INORGANIC . . . SWANN

RADIO CHEMISTRY . . . . . NYSTROM, BROWNLEE, KAY, HUMMEL

CHEM 499 CONTINUED
RESEARCH FOR THE PH. D. IS ALSO OFFERED IN SPECIALIZED FIELDS OTHER THAN THOSE ILLUSTRATED ABOVE. STUDENTS WHO INTEND TO MAJOR IN CHEMISTRY IN ONE OF THESE SPECIAL FIELDS SHOULD CONSULT WITH THE PROFESSOR IN CHARGE OF THE THESIS AND WITH THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING IN REGARD TO THE PROGRAMS OF COURSES AND EXAMINATIONS.

00246	CONF		ARR			STAFF

CHEMICAL ENGINEERING

COURSES FOR ADVANCED UNDERGRADUATES

CH E 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMICAL ENGINEERING CURRICULUM ANY OTHERS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT.
*EACH STUDENT MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. HOWEVER, CH. E. 379 TWO HOURS, MAY BE SUBSTITUTED FOR TWO OF THE FIVE HOURS REQUIRED IN CH. E. 290. IN ORDER TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CH. E. 290.
*2 TO 6 HOURS

00247	CONF		ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CH E 371 PRINCIPLES OF CHEMICAL ENGINEERING.
PREREQUISITE--CH. E. 370 OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT

00248	LECT	8	MTUWTHF	101	E C	SANI
00248	QUIZ	11	M W F	101	E C	

COURSES FOR GRADUATES

CH E 488 HEAT TRANSMISSION.
PREREQUISITE--CH. E. 371, OR EQUIVALENT WITH CONSENT OF INSTRUCTOR.
3/4 UNIT

00249	LECT	11	MTUWTH	193	E C	HUDSON

CH E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
DRICKAMER, HANRATTY, HUDSON,
QUINN, SANI, SWANN, SCHMITZ, WESTWATER,

00250	CONF		ARR			STAFF

CIVIL ENGINEERING

DEPARTMENT OFFICE 203 C E H

COURSES FOR ADVANCED UNDERGRADUATES

C E 262 STRUCTURAL THEORY, II.
PREREQUISITE--C. E. 261.
3 HOURS
00251 LECT-DISC E 8 MTUWTHFS 305 C E H

C E 263 BEHAVIOR AND DESIGN OF METAL STRUCTURES, I.
PREREQUISITE--T.A.M. 224 AND C.E. 261, OR CONSENT OF INSTRUCTOR.
3 HOURS
00252 LECT-DISC E 10 MTUWTHFS 305 C E H

C E 264 REINFORCED CONCRETE DESIGN, I.
PREREQUISITE--T.A.M. 224, C.E. 214, CREDIT OR REGISTRATION IN C.E. 262.
3 HOURS
NOTE--THREE-TWO HOUR DEMONSTRATION LABORATORIES TO BE ARRANGED.
*SECTION F IS A SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 16 FOR MILITARY STUDENTS ONLY.
00253 LECT-DISC E 9 MTUWTHFS 305 C E H
00254 LECT-DISC *F ARR

C E 290 CONTRACTS AND SPECIFICATIONS.
SAME AS G. E. 290.
PREREQUISITE--SENIOR STANDING IN ENGINEERING OR ARCHITECTURE.
3 HOURS
SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 16 FOR MILITARY STUDENTS ONLY.
00255 LECT-DISC E ARR

C E 297 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING.
1 TO 4 HOURS
00256 CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C E 334 AIRPORT DESIGN.
PREREQUISITE--C.E. 220 AND SENIOR STANDING IN CIVIL ENGINEERING, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
00257 LECT-DISC E 1 MTUWTHF 200 T L HERRIN

C E 366 BEHAVIOR OF REINFORCED CONCRETE MEMBERS.
PREREQUISITE--UNDERGRADUATES-SENIOR STANDING AND C.E. 264, GRAD STUDENTS-B.S.DEGREE IN C.E. OR ARCHITECTURE WITH COURSES IN STRUCTURES AND REINFORCED CONCRETE DESIGN.
4 HOURS, OR 1 UNIT
00258 LECT-DISC 1-3 M W F 320 C E H SIESS

C E 368 PRESTRESSED CONCRETE.
PREREQUISITE--C. E. 262, 264.
3 HOURS, OR 3/4 OR 1 UNIT
00259 LECT-DISC E 11 MTUWTHFS 320 C E H KHACHATURIAN

C E 380 FOUNDATION ENGINEERING.
PREREQUISITE--C E 210, SENIOR STANDING.
3 HOURS, OR 1 UNIT
00260 LECT-DISC E 8 MTUWTHFS 320 C E H

C E 383 SOIL MECHANICS.
UNDERGRADUATE PREREQUISITE--C.E. 210, SENIOR STANDING AND CONSENT OF INSTRUCTOR. GRADUATE PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT
00261 LECT-DISC E 11 MTUWTHFS 200 T L IRELAND

C E 391 NUMERICAL AND COMPUTER APPLICATIONS IN CIVIL ENGINEERING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN CIVIL OR ARCH. ENG. OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
00262 LECT-DISC E 9 MTUWTHFS 322 C E H LEONARD

COURSES FOR GRADUATES

C E 456 HYDRAULICS OF SURFACE DRAINAGE.
PREREQUISITE--T.A.M. 235.
1 UNIT
*ADDITIONAL HOUR TO BE ARRANGED.
00263 LECT-DISC 10 MTUWTHF 320 C E H MURTHA

C E 460 STRUCTURAL ANALYSIS.
PREREQUISITE--B.S. DEGREE IN ENGINEERING AND UNDERGRADUATE COURSE IN THEORY OF SIMPLE STRUCTURES.
1 UNIT
00264 LECT-DISC E 10 MTUWTHF 322 C E H HALTIWANGER

C E 461 STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--B.S. IN C.E., AND C.E. 361, OR C.E. 460, OR EQUIVALENT
1 UNIT
00265 LECT-DISC E 11 MTUWTHF 322 C E H STALLMEYER

C E 465 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--B.S. IN ENGINEERING WITH COURSES IN STRUCTURES.
1 UNIT
00266 LECT-DISC E 3 MTUWTHF 305 C E H

C E 471 NUMERICAL AND APPROXIMATE METHODS OF STRUCTURAL ANALYSIS.
1 TO 2 UNITS
00267 LECT-DISC E 9 MTUWTHF 320 C E H MELIN

C E 475 BEHAVIOR OF STEEL STRUCTURES.
PREREQUISITE--GRADUATE STANDING IN C.E. OR T.A.M.
1 UNIT
00268 LECT-DISC E 8 MTUWTHF 200 T L MUNSE

C E 484 FOUNDATION ENGINEERING.
PREREQUISITE--C. E. 384.
1 UNIT
00269 LECT-DISC 2 MTUWTHF 200 T L PECK

C E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS
00270 CONF O ARR STAFF

C E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION-M-IS FOR MASTERS DEGREE, *SECTION-D-IS FOR PH.D. DEGREE.
00271 CONF M ARR STAFF
00272 CONF D ARR STAFF

CLASSICS

DEPARTMENT OFFICE 360 L H

CLASSICAL CIVILIZATION

NOTE--THE FOLLOWING COURSES PRESUPPOSE NO KNOWLEDGE OF THE GREEK OR LATIN LANGUAGE AND ARE OPEN TO ALL STUDENTS. FOR OTHER COURSES IN THE AREA OF CLASSICAL CIVILIZATION SEE ARCH. 113, ART 311, HIST. 181, 182, 381, 382, 383, AND 384, AND PHIL. 303 AND 309.

COURSES FOR UNDERGRADUATES

CLCIV 112 GREEK DRAMA IN ENGLISH TRANSLATION.
2 HOURS
00273 LECT-DISC A 8 TUWTHF 362 L H SMITH

COMMUNICATIONS

DEPARTMENT OFFICE 119 G H

THE GRADUATE PROGRAM LEADING TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATIONS IS ADMINISTERED BY AN INTERDISCIPLINARY COMMITTEE APPOINTED BY THE DEAN OF THE GRADUATE COLLEGE. STUDENTS SEEKING ADMISSION TO THIS PROGRAM SHOULD CONSULT THEODORE PETERSON, CHAIRMAN OF THE COMMITTEE.

OF THE COURSES OFFERED THIS TERM, COMM. 490 AND 499 ARE IN THE GENERAL CATEGORY. COMM. 473 IS IN GROUP A. GROUP B HAS NO OFFERINGS THIS TERM.

COURSES FOR GRADUATES

COMM 473 HISTORY AND THEORY OF FREEDOM OF THE PRESS.
SAME AS JOURN. 473.
1 UNIT
00274 LECT-DISC 10-12 TU TH 123 G H CAREY

COMM 483 ADVERTISING AND THE MASS MEDIA.
SAME AS ADV. AND MKTG. 483.
1 UNIT
00275 LECT-DISC 10-12 M W 123 G H BARBAN

COMM 490 SPECIAL TOPICS IN COMMUNICATIONS.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS.
1/2 TO 2 UNITS
00276 CONF ARR STAFF

COMM 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS AND THESIS SUPERVISOR.
*STUDENTS MAY ACCUMULATE A TOTAL OF 8 UNITS.
*0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00277 CONF ARR STAFF

DAIRY SCIENCE

DEPARTMENT OFFICE 315 A S L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

D S 300 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5--NOT OPEN TO STUDENTS ON PROBATION-SENIOR STANDING-CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT.
3 TO 5 HOURS, OR 1/2 OR 1 UNIT
SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.

00278	CONF		ARR				SALISBURY AND STAFF

D S 330 REPRODUCTION AND ARTIFICIAL INSEMINATION OF FARM ANIMALS.
SAME AS AN. S. 330.
PREREQUISITE--ZOOL. 104 AND EITHER D. S. 100 OR AN. S. 100.
3 HOURS, OR 3/4 UNIT, 1/2 UNIT FOR FOUR WEEK SUMMER SESSION FIRST FOUR WEEKS--JUNE 19 TO JULY 14.
*ADDITIONAL HOURS TO BE ARRANGED

00279	LAB-DISC		*10-12	MTUWTHF	414	A S L	LODGE AND GRAVES

COURSES FOR GRADUATES

D S 493 SPECIAL PROBLEMS.
1/2 TO 2 UNITS

00280	CONF		ARR				SALISBURY AND STAFF

D S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00281	CONF		ARR				SALISBURY AND STAFF

DAIRY TECHNOLOGY

SEE FOOD SCIENCE

DIVISION OF GENERAL STUDIES L A S

DEPARTMENT OFFICE 221 A H

COURSES FOR UNDERGRADUATES

D G S 111 VERBAL COMMUNICATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

00282	DISC	A	8-10	MTUWTH	141	A H	
00283	DISC	E	1-3	MTUWTH	148	ADMIN	

D G S 121 HISTORY OF CIVILIZATION, I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

00284	LECT-DISC	A	8-10	MTUWTH	148	ADMIN	POWELL

D G S 131 BIOLOGICAL SCIENCE, I.
*CREDIT IS NOT GIVEN IN D. G. S. 131 IN ADDITION TO CREDIT IN BOT. 100, PHYSL. 103, ZOOL. 101, OR 104.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

00285	LECT		11	MTUWTH	247	N H B		LEE
00286	LAB-DISC	1	1-3	MTUWTH	432	N H B		
00287	LAB-DISC	2	3-5	MTUWTH	432	N H B		

D G S 161 LITERATURE AND FINE ARTS, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
4 HOURS

00288	LECT-DISC		1-3	MTUWTH	196	L H		DRAPER

ECONOMICS

DEPARTMENT OFFICE 330 COM W

MAJOR--FOR L A S STUDENTS WHO ENTERED THE UNIVERSITY SEPTEMBER, 1964, AND AFTER--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108- OR 102 AND 103-171, 300, AND 301. MATH. 124 AND 134 OR 358 AND 359 ARE ALSO REQUIRED BUT ARE NOT ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR. LIBERAL ARTS MAJORS ARE STRONGLY ADVISED TO ELECT ACCY 201, WHICH IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

FOR L A S STUDENTS WHO ENTERED THE UNIVERSITY BEFORE SEPTEMBER, 1964--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108 OR 102 AND 103, AND ECON. 300 AND 301. LIBERAL ARTS MAJORS IN ECONOMICS ARE STRONGLY ADVISED TO ELECT ECON. 171 AND ACCY 201. ECON. 171 IS ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR, BUT ACCY. 201 IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, EDUCATION, FINANCE, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY. AN ECONOMICS MAJOR WHO CHOOSES FINANCE AS A MINOR MUST INCLUDE TWELVE HOURS IN A SECOND MINOR. THE CURRICULUM IN LATIN-AMERICAN OR RUSSIAN AREA STUDIES IS ACCEPTED AS A MINOR.

NOTE--ECON. 102 AND 103 ARE REQUIRED FOR ALL COMMERCE STUDENTS, AND THESE OR 108 ARE REQUIRED FOR ALL LIBERAL ARTS MAJORS IN ECONOMICS. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN ECONOMICS SHOULD TAKE THESE COURSES IN THEIR SOPHOMORE YEAR.

COURSES FOR UNDERGRADUATES

ECON 102 PRINCIPLES OF ECONOMICS, I.
PREREQUISITE--ONE SEMESTER OF UNIVERSITY WORK
3 HOURS

00289	LECT-DISC	B	9	MTUWTHF	40	COM W		
		B	3	TU	40	COM W		

ECON 108 ELEMENTS OF ECONOMICS.
NOT OPEN TO COMMERCE STUDENTS OR STUDENTS WHO HAVE HAD ECON. 102 AND 103.
PREREQUISITE--FIRST SEMESTER FRESHMAN IN ENGINEERING, SECOND SEMESTER FRESHMAN IN OTHER COLLEGES.
3 HOURS

00290	LECT-DISC	A	8	MTUWTHF	130	COM W		
		A	3	M	130	COM W		
00291	LECT-DISC	C	10	MTUWTHF	140	COM W		
		C	3	W	140	COM W		

ECON 170 ELEMENTS OF STATISTICS.
PREREQUISITE--ECON. 102 OR 108, SOPHOMORE STANDING.
*NOT OPEN FOR CREDIT IN ADDITION TO ECON. 171, MATH. 161, OR PSYCH. 135.
*3 HOURS

00292	LECT-DISC	B	9	MTUWTHF	36	COM W		WEBER
		B	3	TU	36	COM W		

COURSES FOR ADVANCED UNDERGRADUATES

ECON 214 GOVERNMENT FINANCE AND TAXATION.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

00293	LECT-DISC	D	11	MTUWTHF	36	COM W		MORGAN
		D	3	TH	36	COM W		

ECON 228 INTERNATIONAL FINANCE.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

00294	LECT-DISC	B	9	MTUWTHF	130	COM W		
		B	3	TU	130	COM W		

ECON 240 LABOR PROBLEMS.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

00295	LECT-DISC	C	10	MTUWTHF	36	COM W		MCNATT
		C	3	W	36	COM W		

ECON 290 HONORS COURSE.
PREREQUISITE--A MAJOR IN ECONOMICS, AT LEAST FIFTEEN HOURS OF ADVANCED COURSES.
2 TO 4 HOURS

00296	DISC		ARR					

ECON 292 INDEPENDENT STUDY.
PREREQUISITE--CONSENT OF CHAIRMAN OF DEPARTMENT.
*3 TO 5 HOURS

00297	DISC		ARR					

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ECON 300 INTERMEDIATE ECONOMIC THEORY AND ANALYSIS.
PREREQUISITE--ECON. 103, OR 109, OR A GRADE OF B OR BETTER IN ECON. 108.
3 HOURS, OR 1/2 UNIT

00298	LECT-DISC	A	8	MTUWTHF	36	COM W		WEBER
		A	3	M	36	COM W		

ECON 336 AMERICAN ECONOMIC HISTORY.
3 HOURS, OR 1/2 OR 1 UNIT

00299	LECT-DISC	D	11	MTUWTHF	40	COM W		MARKWALDER
		D	3	TH	40	COM W		

ECON 372 OPERATIONS RESEARCH.
PREREQUISITE--ECON. 170 AND MGMT. 101, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00300	LECT-DISC	C	10	MTUWTHF	40	COM W		
		C	3	W	40	COM W		

COURSES FOR GRADUATES

ECON 400 GENERAL ECONOMIC THEORY.
PREREQUISITE--ECON. 102 AND 103, OR 108.
1 UNIT

00301	LECT-DISC		9	MTUWTH	152	COM W		WELLS

ECON 407 A HISTORY OF ECONOMIC THOUGHT, II.
1 UNIT

00302	LECT-DISC		10-12	TU F	130	COM W		BELL

ECON 428 INTERNATIONAL ECONOMICS AND FINANCE, I.
1 UNIT

00303	LECT-DISC		10-12	M TH	130	COM W		BREMS

```
ECON  440     LABOR ECONOMICS.
              SAME AS L.I.R. 440.
         PREREQUISITE--A MINIMUM OF SIX HOURS IN ECONOMICS.
         1 UNIT
        00304   LECT-DISC          1-3        TU   F   130  COM W          MCNATT


ECON  490     INDIVIDUAL STUDY AND RESEARCH.
         1/2 TO 1 UNIT
        00305   DISC             ARR


ECON  499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
        00306   LECT-DISC         10-12         W       130  COM W          BELL
```

EDUCATION ADMINISTRATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR GRADUATES

```
ED AD 430     ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION.
         PREREQUISITE--EL. ED. 431 AND 439.
         1 UNIT
         MEETS FIRST FOUR WEEKS ONLY.
        00307   LECT-DISC          9-11       TUWTHF   126  COM W          SPRINGER


ED AD 438     INSTRUCTIONAL SUPERVISION.
         PREREQUISITE--EL. ED. OR SE. ED. 439, AND ED. AD. 430 OR 440.
         1 UNIT
        00308   LECT-DISC  A       8          TUWTHF   389  EDUC           MANDLAKES
        00309   LECT-DISC  B      10          TUWTHF     1  EDUC           BARNES


ED AD 440     ADMINISTRATION AND SUPERVISION OF JUNIOR AND SENIOR HIGH
              SCHOOLS.
         PREREQUISITE--ED. AD. 460 OR CONSENT OF INSTRUCTOR.
         1 UNIT
         *MEETS FIRST FOUR WEEKS ONLY.
        00310   LECT-DISC         *9-11       TUWTHF   385  EDUC           KAISER


ED AD 449     INDEPENDENT STUDY.
         *MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
         *1/2 OR 1 UNIT
         *SPECIAL SEMINAR ON PROBLEMS OF STAFF PERSONNEL,
         ADVANCED DEGREE CANDIDATES ONLY.
        00312   CONF      *A     ARR                                        CHAMBERS
        00311   CONF             ARR                                        STAFF


ED AD 460     PUBLIC CONTROL AND ADMINISTRATION OF EDUCATION.
         NOT OPEN TO EXPERIENCED ADMINISTRATORS OR TO ANY STUDENTS WHO HAVE
         TAKEN ANY OF THE FOLLOWING COURSES--OR EQUIVALENT--ED. AD. 430,
         440, 461, 462, 464, 465, 466.
         1 UNIT
        00313   LECT-DISC  A       8          TUWTHF   137  ARMORY         MILLER
        00314   LECT-DISC  C      10          TUWTHF   137  ARMORY         HENCLEY


ED AD 461     ADMINISTRATION OF EDUCATIONAL PROGRAMS AND PERSONNEL.
         PREREQUISITE--ED. AD. 460, AND 430 OR 440.
         1 UNIT
        00315   LECT-DISC         11-3        TU TH    120  COM W          HENCLEY, COX


ED AD 463     THE ROLE OF ADMINISTRATIVE LEADERSHIP.
         PREREQUISITE--ED. AD. 460 AND 461 AND 430 OR 440.
         1 UNIT
        00316   LECT-DISC         11-3        TU TH     20  COM W          MILLER,
                                                                           CHAMBERS
```

ED AD 464 FIELD PROBLEMS IN EDUCATIONAL ADMINISTRATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS
*FOR STUDENTS IN SPECIAL EDUCATION ONLY
SECTIONS A AND B MEET SECOND FOUR WEEKS ONLY.

00317	CONF	A	8-11	TUWTHF	20	COM W	SPRINGER
00318	CONF	B	9-12	TUWTHF	126	COM W	KAISER
00319	CONF	*H	ARR				HENDERSON

ED AD 466 PUBLIC SCHOOL FINANCE.
PREREQUISITE--ED. AD. 460 AND 430 OR 440 AND CONSENT OF INSTRUCTOR.
1 UNIT

00320	LECT-DISC		9	TUWTHF	389	EDUC	MCLURE

ED AD 468 SCHOOL-COMMUNITY RELATIONS.
1 UNIT

00321	LECT-DISC		9	TUWTHF	94	COM W	SUMPTION

ED AD 469 LEGAL BASIS OF SCHOOL ADMINISTRATION.
1 UNIT

00322	LECT-DISC		10	TUWTHF	94	COM W	SUMPTION

ED AD 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

00323	CONF		ARR				MCCLEARY

ED AD 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

00324	CONF		ARR				STAFF

ED AD 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

00325	CONF		ARR				STAFF

EDUCATIONAL PSYCHOLOGY

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR ADVANCED UNDERGRADUATES

EDPSY 211 EDUCATIONAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100.
3 HOURS

00326	LECT-DISC		8	TUWTHF	136	ARMORY	
00326	LAB		1-3	TU	136	ARMORY	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

EDPSY 311 PSYCHOLOGY OF LEARNING FOR TEACHERS.
PREREQUISITE--ED. PSY. 211, PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS, OR 1/2 UNIT
*MEETS SECOND FOUR WEEKS ONLY.

00327	LECT-DISC	A1	8	TUWTHF	2	EDUC	GARVERICK
00328	LECT-DISC	A2	8	TUWTHF	328	ARMORY	KNAPP
00329	LECT-DISC	B1	9	TUWTHF	330	ARMORY	CAMPBELL
00330	LECT-DISC	B2	9	TUWTHF	328	ARMORY	PHILLIPS
00331	LECT-DISC	C1	10	TUWTHF	328	ARMORY	
00332	LECT-DISC	C2	10	TUWTHF	330	ARMORY	
00333	LECT-DISC	D1	11	TUWTHF	136	ARMORY	KNAPP
00334	LECT-DISC	D2	11	TUWTHF	328	EDUC	
00335	LECT-DISC	*E	1-3	TUWTHF	1	EDUC	NOBLE

EDPSY 312 MENTAL HYGIENE AND THE SCHOOL.
PREREQUISITE--ED.PSY. 211, PRACTICE TEACHING OR TEACHING EXPERIENCE.
2 HOURS, OR 1/2 UNIT
*MEETS FIRST FOUR WEEKS ONLY

00336	LECT-DISC	A1	8	TUWTHF	134	ARMORY	BONEY
00337	LECT-DISC	A2	8	TUWTHF	330	ARMORY	
00338	LECT-DISC	B1	9	TUWTHF	1	G H	BERNOS
00339	LECT-DISC	B2	9	TUWTHF	332	ARMORY	ROBINSON
00340	LECT-DISC	C1	10	TUWTHF	332	ARMORY	KACZKOWSKI
00341	LECT-DISC	C2	10	TUWTHF	429	ARMORY	SHOEMAKER
00342	LECT-DISC	D	11	TUWTHF	389	EDUC	TOTH
00343	LECT-DISC	*E	1-3	TUWTHF	192	EDUC	MAZER

EDPSY 326 INTRODUCTION TO VOCATIONAL REHABILITATION COUNSELING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

00344	LECT-DISC		ARR				PATTERSON

EDPSY 343 INDIVIDUAL INTELLIGENCE TESTING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY AND SP. ED. 324, OR ED. PSY. 392 OR PSYCH. 290, OR EQUIVALENT.
3 HOURS, OR 1 UNIT
*OPEN ONLY TO STUDENTS ENROLLED IN ACADEMIC YEAR GUID INST.

00345	LECT		1-3	TUWTHF	134	E P G B	NEWLAND

EDPSY 390 ELEMENTS OF EDUCATIONAL STATISTICS.
3 HOURS, OR 1 UNIT

00346	LECT-DISC	A1	8-10	TUWTHF	429	ARMORY	VANHORN
00347	LECT-DISC	A2	8-10	TUWTHF	242	EDUC	HASTINGS
00348	LECT-DISC	B	10-12	TUWTHF	242	EDUC	STAKE

EDPSY 391 CONSTRUCTION AND USE OF TESTS IN TEACHING.
PREREQUISITE--ED. PSY. 211.
4 HOURS, OR 1 UNIT

00349	LECT-DISC		11	TUWTHF	192	EDUC	GRONLUND

EDPSY 392 INTRODUCTION TO THE PRINCIPLES OF MEASUREMENT.
PREREQUISITE--ED. PSY. 211.
4 HOURS, OR 1 UNIT

00350	LECT-DISC	B	9	TUWTHF	431	ARMORY	GRONLUND
00351	LECT-DISC	D	11	TUWTHF	431	ARMORY	MAZER

COURSES FOR GRADUATES

EDPSY 411 PSYCHOLOGY OF ADOLESCENCE FOR TEACHERS.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

00352	LECT-DISC	A	8	TUWTHF	223	G H	BLAIR
00353	LECT-DISC	B	9	TUWTHF	2	EDUC	JONES

EDPSY 412 ADVANCED CHILD DEVELOPMENT FOR STUDENTS OF EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

00354	LECT-DISC		8	TUWTHF	431	ARMORY	

EDPSY 413 SOCIAL PSYCHOLOGY AND THE PROBLEMS OF EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT
*PRIMARILY FOR STUDENTS IN SCHOOL ADMINISTRATION.

00355	LECT-DISC	A	8	TUWTHF	213	G H	R SIMPSON
00356	LECT-DISC	B	1	TUWTHF	2	EDUC	R SIMPSON

EDPSY 414 THE PSYCHOLOGY OF COLLEGE TEACHING.
PREREQUISITE--A COURSE IN PSYCHOLOGY, CONSENT OF INSTRUCTOR.
1 UNIT

00357	LECT-DISC		10	TUWTHF	331	ARMORY	GARVERICK

EDPSY 415 PSYCHOLOGICAL THEORIES APPLIED TO EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312, 411 OR 412, CANDIDACY FOR ED. D. OR PH. D. IN EDUCATION.
1 UNIT

00358	LECT-DISC		1-3	W F	162	EDUC	BLAIR

```
EDPSY 422     BASIC PRINCIPLES OF COUNSELING.
        PREREQUISITE--ED. PSY. 311 AND 312.
        1 UNIT
       00359   LECT-DISC  A       8          TUWTHF   331  ARMORY          ROBINSON
       00360   LECT-DISC  B       9          TUWTHF   432  ARMORY          NOBLE
       00361   LECT-DISC  D      11          TUWTHF   331  ARMORY          BONNEY


EDPSY 423     THE USE OF TESTS IN GUIDANCE.
        PREREQUISITE--ED. PSY. 392.
        1 UNIT
        HOURS TO BE ARRANGED.
       00362   LECT-DISC  B       9          TUWTHF    30  COM W           PHILLIPS
       00363   LECT-DISC  C      10          TUWTHF    30  COM W           BERNOS


EDPSY 424     SUPERVISED PRACTICE IN COUNSELING.
        PREREQUISITE--MASTERS DEGREE IN GUIDANCE AND
        CONSENT OF FACULTY COMMITTEE.
        2 UNITS
        *SECTION B FOR STUDENTS ENROLLED IN ACADEMIC YEAR GUID INST.
       00364   LECT-DISC  A     ARR                   188S EDUC            BROPHY
       00365   LECT-DISC  B     ARR                   188S EDUC            PROFF


EDPSY 425     PRINCIPLES OF GUIDANCE.
        *CREDIT IS NOT GIVEN IN BOTH ED. PSY. 325 AND 425.
        *1 UNIT
       00366   LECT-DISC  A       8          TUWTHF   133  ARMORY          KACZKOWSKI
       00367   LECT-DISC  C      10          TUWTHF   431  ARMORY          TOTH
       00368   LECT-DISC  D      11          TUWTHF   330  ARMORY          BONEY


EDPSY 426     DIAGNOSTIC AND REMEDIAL PROGRAMS OF THE SCHOOL.
        PREREQUISITE--A BASIC COURSE IN THE TEACHING OF READING AND
        CONSENT OF INSTRUCTOR.
        1 UNIT
       00369   LECT-DISC  A       8          TUWTHF    15  EDUC            POWELL
       00370   LECT-DISC  B       9          TUWTHF    15  EDUC            WALKER
       00371   LECT-DISC  C      10          TUWTHF    15  EDUC            ERICKSON


EDPSY 427     PRINCIPLES AND TECHNIQUES OF GROUP GUIDANCE.
        PREREQUISITE--ED. PSY. 311, 312, 422, 423, AND EITHER 325 OR 425, OR
        CONSENT OF INSTRUCTOR.
        1 UNIT
       00372   LECT-DISC  A      10-12       TUWTHF   188S EDUC            OHLSEN
       00373   LECT-DISC  B       8-10       TUWTHF   188S EDUC            BONNEY


EDPSY 428     THE ANALYSIS AND USE OF OCCUPATIONAL INFORMATION IN GUIDANCE
              PROGRAMS.
        PREREQUISITE--ED. PSY. 325 OR 425, OR CONSENT OF INSTRUCTOR.
        1 UNIT
       00374   LECT-DISC          8          TUWTHF   307  G H             SHOEMAKER


EDPSY 429     FIELD INSTRUCTION IN COUNSELING.
        PREREQUISITE--ED. PSY. 422 AND 424--WITH CONSENT OF INSTRUCTOR
        ED. PSY. 424 MAY BE TAKEN CONCURRENTLY.
        1 OR 2 UNITS
       00375   PRACT            ARR                                        PATTERSON


EDPSY 496     STATISTICAL METHODS IN EDUCATION.
        PREREQUISITE--ED. PSY. 390.
        1 UNIT
        *LABORATORY HOURS TO BE ARRANGED.
       00376   LECT-DISC *       11          TUWTHF   162  EDUC            PINGRY
       00376   LAB                1-3        TUW  F   242  EDUC
```

DEPARTMENT OFFICE 155 E E B

COURSES FOR ADVANCED UNDERGRADUATES

E E 220 BASIC ELECTRICAL ENGINEERING.
PREREQUISITE--PHYSICS 106 AND 107, AND MATH 143.
3 HOURS

00377	DISC	A	8	MTUWTHF	136	E E B
		A	1	TU	136	E E B
00378	DISC	B	9	MTUWTHF	136	E E B
		B	1	M	136	E E B

E E 229 INTRODUCTION TO ELECTROMAGNETIC FIELDS.
PREREQUISITE--PHYCS. 107, T.A.M. 154, MATH. 345, CREDIT OR REGISTRATION IN E.E. 250.
3 HOURS

00379	DISC	A	11	MTUWTHF	168	E E B
		A	1	TH	168	E E B

E E 230 APPLICATION AND CONTROL OF MOTORS AND EQUIPMENT.
PREREQUISITE--E E 220.
2 HOURS

E E 231 POWER EQUIPMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E E 230.
1 HOUR

00381	LAB	A	2-5	M W	50E	E E B

E E 234 ELECTRICAL INSTRUMENTS AND MEASUREMENTS.
PREREQUISITE--E E 220.
2 HOURS

00382	DISC	A	10	MTUWTH	168	E E B

E E 235 ELECTRICAL MEASUREMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 234.
1 HOUR

00383	LAB	A	2-5	TU TH	137	E E B

E E 250 LINEAR NETWORK THEORY I.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN E. E. 251, MATH. 195 AND 345.
5 HOURS

00384	DISC	A	8-10	MTUWTHF	168	E E B
00385	DISC	B	8-10	MTUWTHF	163	E E B

E E 251 CIRCUIT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 250.
1 HOUR

00386	LAB	A	2-5	M W	50H	E E B
00387	LAB	B	2-5	TU TH	50H	E E B

E E 271 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS
*SECTION M IS RESTRICTED TO STUDENTS ENROLLED IN U OF I NSF PROGRAM IN ELECTRONICS.

00388	DISC	M	ARR
00389	DISC	I	ARR

E E 272 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

00390	DISC	A	ARR

E E 288 ECONOMIC ASPECTS OF ENGINEERING.
SAME AS G. E. 288.
PREREQUISITE--JUNIOR STANDING IN ENGINEERING, ECON. 108 OR CONSENT OF INSTRUCTOR.
3 HOURS

00391	DISC	A	9	MTUWTHF	260	E E	B
		A	1	TU	260	E E	B
00392	DISC	B	10	MTUWTHF	260	E E	B
		B	1	W	260	E E	B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

E E 322 LINEAR NETWORK THEORY, 11.
PREREQUISITE--E.E. 250, 251, MATH. 195, 345.
4 HOURS, OR 0 TO 1 UNIT

00393	DISC	A	8-10	MTUWTH	170	E E	B

E E 323 CIRCUIT LABORATORY.
PREREQUISITE--E. E. 250 AND 251, CREDIT OR REGISTRATION IN E. E. 322 AND 350.
1 HOUR, OR 0 OR 1/4 UNIT

00394	LAB	A	2-5	M W	132	E E	B

E E 330 MAGNETIC CIRCUITS AND TRANSFORMERS.
PREREQUISITE--E.E. 229, 250, 251, CREDIT OR REGISTRATION IN E.E. 331
3 HOURS, OR 0 OR 3/4 UNIT

00395	DISC	A	8	MTUWTHF	133	E E	B
		A	1	M	169	E E	B

E E 331 MAGNETIC CIRCUITS AND TRANSFORMER LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 330.
1 HOUR, OR 0 OR 1/4 UNIT

00396	LAB	A	2-5	M W	50K	E E	B
00397	LAB	B	2-5	TU TH	50K	E E	B

E E 332 ELECTRICAL MACHINERY.
PREREQUISITE--E E 330 AND 331, CREDIT OR REGISTRATION IN E E 333.
3 HOURS, OR 0 OR 3/4 UNIT

00398	DISC	A	8	MTUWTHF	169	E E	B
		A	1	F	269	E E	B
00399	DISC	B	9	MTUWTHF	169	E E	B
		B	1	F	269	E E	B

E E 333 ELECTRICAL MACHINERY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 332.
1 HOUR, OR 0 OR 1/4 UNIT

00400	LAB	A	2-5	M W	50F	E E	B
00401	LAB	B	2-5	TU TH	50F	E E	B
00402	LAB	C	10-1	M W	50F	E E	B

E E 340 ELECTRONICS.
PREREQUISITE--E. E. 250 AND 251.
3 HOURS, OR 0 OR 3/4 UNIT

00403	DISC	A	10	MTUWTHF	163	E E	B
		A	1	M	168	E E	B

E E 341 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 340.
1 HOUR, OR 0 OR 1/4 UNIT

00404	LAB	A	2-5	TU TH	235	E E	B

E E 342 ADVANCED ELECTRONICS.
PREREQUISITE--E. E. 322, 340 AND 341.
3 HOURS, OR 0 OR 3/4 UNIT

00405	DISC	A	11	MTUWTHF	269	E E	B
		A	1	TH	269	E E	B
00406	DISC	B	11	MTUWTHF	141	E E	B
		B	1	TH	141	E E	B

E E 343 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 342.
1 HOUR, OR 0 OR 1/4 UNIT

00407	LAB	A	2-5	M W	238	E E B
00408	LAB	B	2-5	TU TH	238	E E B

E E 350 LINES, FIELDS, AND WAVES.
PREREQUISITE--E. E. 229, MATH. 195, CREDIT OR REGISTRATION IN E. E. 323.
3 HOURS OR 3/4 UNIT

00409	DISC	A	10	MTUWTHF	269	E E B
		A	1	W	269	E E B

E E 352 ELECTROMAGNETIC FIELDS.
PREREQUISITE--E. E. 350, 323, CONCURRENT REGISTRATION IN E. E. 356 IS RECOMMENDED.
3 HOURS, OR 3/4 UNIT

00410	DISC	A	10	MTUWTHF	169	E E B
		A	1	W	169	E E B

E E 355 FIELDS AND WAVES.
PREREQUISITE--E.E. 229 AND 350, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 3/4 UNIT

00411	DISC	A	8	MTUWTHF	141	E E B
		A	1	M	141	E E B

E E 356 MICRO WAVE TECHNIQUES.
PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 352 OR 355.
1 HOUR, OR 0 OR 1/4 UNIT

00412	LAB	A	2-5	TU TH	251	E E B

E E 381 PULSE TECHNIQUES.
PREREQUISITE--E. E. 322, 340, AND 341, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH E. E. 347 AND E. E. 381.
*4 HOURS, OR 0 OR 1 UNIT

00413	DISC	A	10	MTUWTHF	133	E E B
		A	1	W	133	E E B
00413	LAB	A	2-5	M W	234	E E B

E E 382 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT

00414	DISC	A	9	MTUWTHF	335	E E B
		A	1	TU	335	E E B
00414	LAB	A	2-5	TU TH	241	E E B

E E 383 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

00415	DISC	A	9	MTUWTHF	335	E E B
		A	1	TU	335	E E B

E E 388 ELECTRONIC ANALOG COMPUTERS.
PREREQUISITE--E.E. 340, 341, MATH. 345 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 1 UNIT

00416	DISC	A	11	MTUWTHF	170	E E B
		A	1	TH	170	E E B
00417	LAB	M	1-3	TU TH	262	E E B
00418	LAB	N	3-5	TU TH	262	E E B

COURSES FOR GRADUATES

E E 415 CONTROL SYSTEM THEORY AND DESIGN.
PREREQUISITE--E.E. 386 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1 UNIT

00419	DISC	A	10	MTUWTHF	170	E E B
		A	1	W	170	E E B

E E 416 ANALYSIS OF LINEAR NETWORKS AND SYSTEMS.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 346 OR 348, E.E. 322 OR EQUIVALENT.
1 UNIT

00420	DISC	A	9	MTUWTHF	141	E E B	
		A	1	TU	141	E E B	
00421	DISC	B	10	MTUWTHF	141	E E B	
		B	1	TU	141	E E B	

E E 420 ELECTROMAGNETIC WAVES AND RADIATING SYSTEMS.
PREREQUISITE--E.E. 352.
1 UNIT

00422	DISC	A	8	MTUWTHF	269	E E B	
		A	1	M	269	E E B	
00423	DISC	B	9	MTUWTHF	269	E E B	
		B	1	TU	269	E E B	

E E 422 ADVANCED COMMUNICATION NETWORKS.
1 UNIT

00424	DISC	A	11	MTUWTHF	260	E E B	
		A	1	TH	260	E E B	

E E 498 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN ELECTRICAL ENGINEERING.
1/2 TO 2 UNITS
*SECTION B RESTRICTED TO STUDENTS ENROLLED IN UI-NSF INSTITUTE IN ENGINEERING TECHNOLOGY

00426	DISC	*B	11	MTUWTHF	234	E E B	
		*B	8-11	TU TH	234	E E B	
00425	DISC	I	ARR				

E E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00427	CONF		ARR				

ELEMENTARY EDUCATION

DEPARTMENT OFFICE 306 EDUC

COURSES FOR ADVANCED UNDERGRADUATES

EL ED 230 PRINCIPLES OF ELEMENTARY EDUCATION.
PREREQUISITE--SENIOR STANDING, CONCURRENT REGISTRATION IN EL. ED. 231 AND ED. PR. 232. SUMMER SESSION-SENIOR STANDING.
2 HOURS

00428	LECT-DISC	9	TUWTHF	133	ARMORY	IRVING

EL ED 233 CLASSROOM PROGRAMS IN CHILDHOOD EDUCATION.
PREREQUISITE--JUNIOR STANDING, EL. ED. 236.
2 HOURS

00429	LECT-DISC	11	TUWTHF	133	ARMORY	IRVING

EL ED 235 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 101, JUNIOR STANDING.
3 HOURS.

00430	LECT-DISC	10	TUWTHF	133	ARMORY	HUSER

EL ED 236 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--PSYCH. 100, EL. ED. 101.
3 HOURS

00431	LECT	10	TUWTHF	389	EDUC	
00431	LAB	1-3	TU TH	385	EDUC	

EL ED 237 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--EL. ED. 236, CONCURRENT REGISTRATION IN EL. ED. 233.
SUMMER SESSION--EL. ED. 236.
3 HOURS

00432	LECT	8	TUWTHF	46	EDUC	
00432	LAB	1-3	TU TH	162	EDUC	

EL ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

00433	CONF		ARR				STAFF

EL ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

00434	CONF		ARR				STAFF

EL ED 292 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

00435	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

EL ED 335 SCIENCE IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 233 AND 237, OR EQUIVALENT, TWO YEARS OF COLLEGE SCIENCE.
3 HOURS, OR 1/2 UNIT
*LECTURE 1 REQUIRES ADDITIONAL HOURS TO BE ARRANGED.

00437	LECT	*1	10	TUWTHF	4G	EDUC	WELLER
00436	LAB		ARR				

EL ED 336 PRIMARY READING.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 UNIT

00438	LECT-DISC	A	8	TUWTHF	162	EDUC	SHORES
00439	LECT-DISC	D	11	TUWTHF	385	EDUC	POWELL

EL ED 337 ART EDUCATION IN THE ELEMENTARY SCHOOL.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 UNIT

00440	LECT-DISC	B	9	TUWTHF	106	F A B	SMITH
00441	LECT-DISC	D	11	TUWTHF	106	F A B	SMITH

COURSES FOR GRADUATES

EL ED 431 ELEMENTARY SCHOOL CLASSROOM PROGRAMS.
1 UNIT
*SECTION A MEETS FIRST FOUR WEEKS ONLY.
SECTION C MEETS SECOND FOUR WEEKS ONLY.

00444	LECT-DISC	*A	10-12	TUWTHF	134	ARMORY	CHALTAS
00442	LECT-DISC	B	9	TUWTHF	1	EDUC	BARNES
00445	LECT-DISC	*C	10-12	TUWTHF	28	EDUC	STENDLER
00443	LECT-DISC	D	11	TUWTHF	2	EDUC	JOHNSON

EL ED 433 CURRICULUM PROBLEMS AND TRENDS IN SPECIAL FIELDS OF ELEMENTARY EDUCATION.
PREREQUISITE--EL. ED. 431, LANGUAGE ARTS SECTION--EL. ED. 336 OR A COURSE IN THE TEACHING OF READING OR LANGUAGE ARTS, OR CONSENT OF INSTRUCTOR, CREATIVE ARTS SECTION--EL. ED. 337 OR CONSENT OF INSTRUCTOR, SCIENCE SECTION--EL. ED. 335 OR A METHODS COURSE IN TEACHING SCIENCE IN THE ELEMENTARY SCHOOL AND TWO YEARS OF COLLEGE SCIENCE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION A IS FOR LANGUAGE ARTS.
*SECTION B IS FOR SOCIAL STUDIES.
*SECTION C IS FOR ARITHMETIC.
*SECTION E IS FOR CREATIVE ARTS.

00446	LECT-DISC	*A1	8	TUWTHF	16	EDUC	EVANS
00447	LECT-DISC	*A2	10	TUWTHF	136	ARMORY	
00448	LECT-DISC	*B1	10	TUWTHF	162	EDUC	MCGILL
00449	LECT-DISC	*B2	8	TUWTHF	385	EDUC	MCGILL
00450	LECT-DISC	*C	9	TUWTHF	136	ARMORY	
00451	LECT-DISC	*E	9	TUWTHF	133	F A B	LANSING

EL ED 434 PROGRAMS IN EARLY CHILDHOOD EDUCATION.
PREREQUISITE--EL. ED. 431.
1 UNIT

00452	LECT-DISC		8	TUWTHF	332	ARMORY	

EL ED 437 METHODS OF CHILD STUDY.
PREREQUISITE--ED. PSY. 312 OR CONSENT OF INSTRUCTOR.
1 UNIT

00453	LECT-DISC		11	TUWTHF	332	ARMORY	

EL ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT

00454	LECT-DISC	A	9	TUWTHF	134	ARMORY	JOHNSON
00455	LECT-DISC	B	10	TUWTHF	2	EDUC	SHORES

EL ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

00456	CONF		ARR				GRADUATE STAFF

EL ED 455 THEORIES OF ART EDUCATION.
PREREQUISITE--EL. ED. 337 OR SE ED 456, OR CONSENT OF INSTRUCTOR.
1 UNIT

00457	LECT-DISC		11	TUWTHF	24	COM W	LANSING

EL ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1 TO 2 UNITS
*SECTION A IS FOR READING AND MEETS FIRST FOUR WEEKS. DESIGNED TO GIVE DIRECT HELP ON THE PROBLEMS WHICH LOCAL SCHOOLS FACE IN ORGANIZING READING PROGRAMS AND IN TEACHING READING. WILL SERVE TO BRING ADMINISTRATORS AND TEACHERS UP TO DATE ON RECENT TRENDS AND DEVELOPMENTS IN METHODS AND MATERIALS, RESEARCH, AND CURRENT EXPERIMENTATION IN TEACHING READING.
*SECTION B IS FOR CREATIVE WRITING AND MEETS SECOND FOUR WEEKS. THIS WORKSHOP WILL EMPHASIZE THE DEVELOPMENT OF CREATIVE WRITING SKILLS IN THE MIDDLE GRADES AND WILL INCLUDE THE STUDY OF RECENT RESEARCH AND THE ANALYSIS OF TRENDS IN PRESENT-DAY PROGRAMS, INSTRUCTIONAL METHODS AND MATERIALS.
*SECTION C IS FOR ELEMENTARY STUDENT TEACHING SUPERVISORS AND MEETS SECOND FOUR WEEKS. THIS WORKSHOP IS ESPECIALLY DESIGNED FOR CLASSROOM TEACHERS AND PRINCIPALS WHO WORK WITH OR ARE PLANNING TO WORK WITH STUDENT TEACHERS. THE WORKSHOP WILL FOCUS ON THE IMPROVEMENT OF SUPERVISION THROUGH THE STUDY AND ANALYSIS OF SUPERVISORY ACTIVITIES, I.E., CURRICULUM SUPERVISION, CONFERENCES, DEMONSTRATION TEACHING, AND EVALUATION.
*SECTION D IS FOR ARITHMETIC AND MEETS FIRST FOUR WEEKS. THIS WORKSHOP FOCUSES ON MODERN DEVELOPMENTS IN THE ELEMENTARY SCHOOL ARITHMETIC PROGRAM AND THE IMPROVEMENT OF TEACHING OF ARITHMETIC. BASIC MATHEMATICAL UNDERSTANDINGS AND CONCEPTS FOR IMPROVED TEACHING METHODS AND MATERIALS WILL BE STRESSED.
*SECTION E IS FOR CURRICULUM DEVELOPMENT IN TEACHER EDUCATION. THIS WORKSHOP IS DESIGNED FOR STUDENTS CENTRALLY CONCERNED WITH TEACHER-EDUCATION PROGRAM DEVELOPMENT. ATTENTION WILL BE GIVEN TO SUCH MAJOR COMPONENTS AS GENERAL, SPECIALIZED, AND PROFESSIONAL EDUCATION. OPPORTUNITIES FOR SYSTEMATIC STUDY OF THE BASES FOR CURRICULUM DEVELOPMENT IN TEACHER EDUCATION AND FOR THE CAREFUL ANALYSES OF EXISTING AND EXPERIMENTAL PROGRAMS WILL BE PROVIDED.

00458	LECT-DISC	A	9-1130	TUWTHF	307	G H	MOORE
		A	130-3	TUWTHF	307	G H	
00459	LECT-DISC	B	9-1130	TUWTHF	307	G H	MOORE
		B	130-3	TUWTHF	307	G H	
00460	LECT-DISC	C	9-1130	TUWTHF	304	G H	CHALTAS
		C	130-3	TUWTHF	304	G H	
00461	LECT-DISC	D	9-1130	TUWTHF	304	G H	C PHILLIPS
		D	130-3	TUWTHF	304	G H	
00462	LECT-DISC	E	10	TUWTHF	120	COM W	MANOLAKES

EL ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

00463	CONF		ARR				GRADUATE STAFF

EL ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

00464	CONF		ARR				GRADUATE STAFF

EL ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

00465	CONF		ARR				GRADUATE STAFF

ENGLISH LITERATURE AND AMERICAN LITERATURE

DEPARTMENT OFFICE 100 E B

MAJOR--A COURSE IN SHAKESPEARE AND TWENTY ADDITIONAL HOURS IN ENGLISH--EXCLUDING ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, AND RHET. 101, 102, 107, 108, 151, 200, 271, 272. OF THESE TWENTY ADDITIONAL HOURS, SEVENTEEN MUST BE TAKEN IN ENGLISH OR AMERICAN LITERATURE, INCLUDING THREE HOURS FROM EACH OF THE FOLLOWING GROUPS-1--AMERICAN LITERATURE-ENGLISH 255, 256-A STUDENT WHO HAS CREDIT FOR ENGLISH 113 OR 114 MAY OFFER ENGLISH 272, 273, 287, 288, 316, 352, 353, 354, 359, 375, 376, 377, OR 380. 2--ENGLISH LITERATURE PRIOR TO 1688-ENGLISH 221, 235, 311, 320, 325, 326, 342, 345. 3--ENGLISH LITERATURE, 1688-1800-ENGLISH 245, 346, 348, 349. 4--ENGLISH LITERATURE, 1800-PRESENT-ENGLISH 246, 263, 264, 265, 266, 281, 282, 283, 284, 382.

FOR UNDERGRADUATE STUDENTS WHO CONTEMPLATE TAKING ADVANCED WORK OR ARE MAJORING IN ENGLISH, THE FOLLOWING SEQUENCES OF COURSES ARE SUGGESTED. FRESHMAN YEAR, FIRST SEMESTER, ENGLISH 101 OR RHETORIC 107-SECOND SEMESTER, ENGLISH 102 OR 103 OR RHETORIC 108. SOPHOMORE YEAR, FIRST SEMESTER, ENGLISH 105 OR ENGLISH 121-SECOND SEMESTER ENGLISH 106 OR ENGLISH 122. ENGLISH 101 AND EITHER 102 OR 103, OR RHETORIC 107 AND 108 ARE THE NORMAL PREREQUISITE TO THE ENGLISH MAJOR. IF NECESSARY, ENGLISH 101, 102, OR 103 MAY BE TAKEN CONCURRENTLY WITH ADVANCED COURSES. IN EXCEPTIONAL CASES, ENGLISH 105 AND 106 OR ENGLISH 121 AND 122 MAY BE ACCEPTED AS ALTERNATIVE PREREQUISITES TO THE MAJOR.

MINORS--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC-NOT INCLUDING APPLIED MUSIC-COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THEIR DEPARTMENTS EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

ENGLISH MAJORS WHO INTEND TO TEACH IN SECONDARY SCHOOLS MUST SEE THE ADVISER ON SPECIAL CURRICULA.

DEPARTMENTAL DISTINCTION--A STUDENT MAJORING IN ENGLISH WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT--4.0 OR HIGHER--MAY EARN DISTINCTION ONLY BY SUCCESSFULLY COMPLETING ENGLISH 297 AND 298 IN ADDITION TO THE REGULAR REQUIREMENTS FOR HIS MAJOR. A STUDENT ENROLLED IN THE TEACHER TRAINING CURRICULUM IN ENGLISH MAY SUBSTITUTE ENGLISH 295 OR 296 FOR ONE SEMESTER OF THE ENGLISH 297-298 SEQUENCE PROVIDED THAT HIS ADVISER APPROVES AND THAT HIS SCHEDULE MAKES SUCH SUBSTITUTION NECESSARY. THE LEVEL OF DISTINCTION--DISTINCTION, HIGH DISTINCTION, OR HIGHEST DISTINCTION--IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THE COURSE AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR. TO RECEIVE HIGHEST DISTINCTION HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF, IN THE OPINION OF THE INSTRUCTORS IN ENGLISH 297 AND 298 AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

MAJOR IN COMPOSITION--SEE RHETORIC AND COMPOSITION.

COURSES FOR UNDERGRADUATES

ENGL 101 INTRODUCTION TO POETRY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

00466	LECT-DISC	A	8	MTUWTHF	140	ADMIN	TIBBETTS
		A	12	M	140	ADMIN	

ENGL 102 INTRODUCTION TO THE DRAMA.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

00467	LECT-DISC	B	9	MTUWTHF	140	ADMIN	STOTTLAR
		B	12	TU	140	ADMIN	

ENGL 103 INTRODUCTION TO FICTION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

00468	LECT-DISC	C	10	MTUWTHF	140	ADMIN	FUMENTO
		C	12	W	140	ADMIN	

ENGL 113 CLASSIC AMERICAN AUTHORS BEFORE THE CIVIL WAR.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 113 IN ADDITION TO ENGL. 255.
*3 HOURS

00469	LECT-DISC	D	11	MTUWTHF	140	ADMIN	MIGNON
		D	12	TH	140	ADMIN	

ENGL 114 CLASSIC AMERICAN AUTHORS AFTER THE CIVIL WAR TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 114 IN ADDITION TO ENGL. 256.
*3 HOURS

00470	LECT-DISC	A	8	MTUWTHF	238	ADMIN	HAMILTON
		A	12	TH	238	ADMIN	

ENGL 121 CHIEF ENGLISH WRITERS BEFORE 1800.
PREREQUISITE--SOPHOMORE STANDING, OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 121 IN ADDITION TO ENGL. 105.
*3 HOURS

00471	LECT-DISC	E	1	MTUWTHF	140	ADMIN	HAIG
		E	12	F	140	ADMIN	

ENGL 122 CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 122 IN ADDITION TO ENGL. 106.
*3 HOURS

00472	LECT-DISC	B	9	MTUWTHF	238	ADMIN	DAVIS
		B	12	F	238	ADMIN	

ENGL 123 CHIEF MODERN ENGLISH WRITERS.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

00473	LECT-DISC	X	12	MTUWTHF	240	ADMIN	LOFTUS
		X	2	M	240	ADMIN	

ENGL 131 INTRODUCTION TO SHAKESPEARE.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102. OR DESIGNATION AS AN EDMUND J. JAMES SCHOLAR.
3 HOURS

00474	LECT-DISC	E	1	MTUWTHF	238	ADMIN	COLE
		E	12	TU	238	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 215 PRACTICAL CRITICISM.
PREREQUISITE--NINE HOURS OF LITERATURE OR CONSENT OF INSTRUCTOR.
3 HOURS

00475	LECT-DISC	B	9	MTUWTHF	252	ADMIN	RUECKERT
		B	12	M	252	ADMIN	

```
ENGL  245     ENGLISH LITERATURE FROM 1688 TO 1789.
        PREREQUISITE--JUNIOR STANDING.
        3 HOURS
      00476   LECT-DISC  A       8        MTUWTHF   252  ADMIN          KALMEY
                         A      12         TU       252  ADMIN


ENGL  255     SURVEY OF AMERICAN LITERATURE, I.
        *CREDIT IS NOT GIVEN FOR BOTH ENGL. 113 AND 255.
        *3 HOURS
      00477   LECT-DISC  C      10        MTUWTHF   252  ADMIN          HASKELL
                         C      12            W     252  ADMIN


ENGL  256     SURVEY OF AMERICAN LITERATURE, II.
        *CREDIT IS NOT GIVEN FOR BOTH ENGL. 114 AND 256.
        *3 HOURS
      00478   LECT-DISC  D      11        MTUWTHF   252  ADMIN          SCOUFFAS
                         D      12             TH   252  ADMIN


ENGL  257     SURVEY OF ENGLISH LITERATURE, I.
        PREREQUISITE--SENIOR STANDING.
        3 HOURS
      00479   LECT-DISC  F       2        MTUWTHF   252  ADMIN          COLE
                         F      12               F  252  ADMIN


ENGL  258     SURVEY OF ENGLISH LITERATURE,II.
        PREREQUISITE--SENIOR STANDING.
        3 HOURS
      00480   LECT-DISC  X      12        MTUWTHF   254  ADMIN          GOLDING
                         X       1        M         254  ADMIN


ENGL  264     VICTORIAN LITERATURE FROM 1859 TO 1901.
        3 HOURS
      00481   LECT-DISC  D      11        MTUWTHF   108  E B            MILLET
                         D      12        M         108  E B


ENGL  284     ENGLISH LITERATURE IN THE TWENTIETH CENTURY, II.
        3 HOURS
      00482   LECT-DISC  C      10        MTUWTHF   108  E B            WASSON
                         C      12         TU       108  E B


ENGL  286     THE SHORT STORY, II.
        PREREQUISITE--ONE COURSE IN ENGLISH OR AMERICAN LITERATURE.
        3 HOURS
      00483   LECT-DISC  B       9        MTUWTHF   108  E B            CURLEY
                         B      12            W     108  E B
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
ENGL  326     SPENSER AND HIS CONTEMPORARIES.
        PREREQUISITE--SIX HOURS OF ENGLISH LITERATURE.
        3 HOURS, OR 3/4 UNIT
                         A       8        MTUWTHF   112  E B            BERRY
                         A      12        M         112  E B


ENGL  345     THE METAPHYSICAL POETS.
        3 HOURS, OR 3/4 UNIT
      00485   LECT-DISC  D      11        MTUWTHF   112  E B            GOLDING
                         D       1         TU       112  E B


ENGL  346     THE AGE OF DRYDEN.
        3 HOURS, OR 3/4 UNIT
      00486   LECT-DISC  C      10        MTUWTHF   112  E B            EVANS
                         C      12            W     112  E B


ENGL  352     AMERICAN LITERATURE--IRVING TO WHITMAN.
        3 HOURS, OR 3/4 UNIT
      00487   LECT-DISC  B       9        MTUWTHF   112  E B
                         B      12             TH   112  E B            GROSS
```

ENGL 403 HISTORY OF THE ENGLISH LANGUAGE.
1 UNIT

00488	LECT-DISC	B	9	MTUWTHF	194	L H	TRAHERN
		B	12	M	194	L H	

ENGL 411 STUDIES IN SIXTEENTH CENTURY LITERATURE, I.
1 UNIT

00489	LECT-DISC	B	9	MTUWTH	117	E B	BERRY

ENGL 413 STUDIES IN SHAKESPEARE.
1 UNIT

00490	LECT-DISC	D	11	MTUWTH	117	E B	EVANS

ENGL 433 MAJOR MOVEMENTS IN MODERN BRITISH POETRY AND DRAMA.
1 UNIT

00491	LECT-DISC	E	1-3	TU TH	240	ADMIN	WASSON

ENGL 438 STUDIES IN AMERICAN LITERATURE AFTER 1800.
PREREQUISITE--SURVEY COURSE IN AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
1 UNIT

00492	LECT-DISC	A	8	MTUWTH	240	ADMIN	GROSS

ENGL 442 STUDIES IN RECENT LITERARY THEORY.
1 UNIT

00493	LECT-DISC	C	10	MTUWTH	240	ADMIN	RUECKERT

ENGL 445 INTRODUCTION TO ADVANCED GRADUATE STUDY.
REQUIRED OF ALL CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGLISH.
1/4 UNIT

00494	LECT-DISC	G	3-5	W	240	ADMIN	GABEL

ENGL 479 PROBLEMS IN VICTORIAN LITERATURE.
PREREQUISITE--ENGL. 431 OR 432.
1 UNIT
TOPIC--GEORGE ELIOT.

00495	LECT-DISC	V	7-9PM	TU TH	43	G H	SMALLEY

ENGL 491 RESEARCH IN SPECIAL TOPICS.
*THIS COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS OF CREDIT.
*1 UNIT

00496	CONF	ARR

ENGL 497 INDEPENDENT READING.
PREREQUISITE--CONSENT OF INSTRUCTOR OF CONCURRENT 300 LEVEL COURSE.
*STUDENTS MAY ACCUMULATE 1/2 UNIT.
*1/4 UNIT

00497	CONF	ARR

ENGL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
INSTRUCTORS--BARKER, DAVIDSON, EVANS, FLANAGAN, GETTMAN, HAIG, HERRICK, HOLADAY, HOOK, KELLEY, LYNEN, MCBURNEY, MILLIGAN, ORNSTEIN, PAUL, ROBERTS, ROBINS, ROGERS, SCOTT, SHATTUCK, SMALLEY, SMITH, STILLINGER, STILLWELL, AND WILSON.

00498	CONF	ARR

ENTOMOLOGY

DEPARTMENT OFFICE 320 MOR HALL

MAJOR--TWENTY HOURS IN ENTOMOLOGY, EXCLUDING ENTOM. 101, 103, AND 131. ZOOL. 318 AND 321 MAY BE APPLIED FOR MAJOR CREDIT. AT LEAST FIVE HOURS MUST BE TAKEN FROM THE ADVANCED GROUP.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--AGRONOMY, BOTANY, CHEMISTRY, HORTICULTURE, MICROBIOLOGY, PHYSIOLOGY, AND ZOOLOGY.

AS A GENERAL POLICY, STUDENTS WHO CONTEMPLATE EVENTUAL CAREERS IN ENTOMOLOGY ARE URGED TO USE THE UNDERGRADUATE YEARS TO GAIN THOROUGH GROUNDING IN THE FUNDAMENTALS OF PHYSICAL AND BIOLOGICAL SCIENCE, IN MATHEMATICS AND THE OTHER LIBERAL ARTS, AND IN THE TECHNIQUES OF COMMUNICATION. THE DEPARTMENT IS GLAD TO ADVISE STUDENTS IN REGARD TO THE MOST EFFECTIVE SCHEDULE OF STUDY TO SUIT THEIR PARTICULAR NEEDS.

ENTOM. 101 AND 103 ARE OPEN TO FRESHMEN, AND 131 TO SOPHOMORES, WITHOUT PREREQUISITES. PREREQUISITES FOR OTHER COURSES ARE INDICATED BELOW.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENTOM 306 SPECIAL PROBLEMS.
PREREQUISITE--ANY OF THE FOLLOWING--ENTOM. 131, 301, 302, 317, 319, 322, OR ZOOL. 101 OR 321, SENIOR STANDING.
2 TO 5 HOURS, OR 1/4 OR 1 UNIT
00499 CONF ARR STAFF

ENTOM 312 ENTOMOLOGY FOR TEACHERS.
PREREQUISITE--ONE YEAR OF BIOLOGY, BOTANY, ZOOLOGY OR EQUIVALENT.
FIELD TRIPS.
3 HOURS, OR 1/2 UNIT
00500 LAB-DISC A 10-12 MTUW F 310 H H WALDBAUER

COURSES FOR GRADUATES

ENTOM 499 THESIS--RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--MORPHOLOGY AND EMBRYOLOGY OF INSECTS	CHADWICK, LARSEN, STERNBURG
B--APPLIED ENTOMOLOGY	DECKER, HORSFALL, KEARNS
C--SYSTEMATIC ENTOMOLOGY	ROSS, SELANDER
D--BIOLOGY AND ECOLOGY OF INSECTS	HORSFALL
E--INSECT PHYSIOLOGY & TOXICOLOGY	CHADWICK, FRAENKEL, FRIEDMAN, KEARNS, LARSEN, STERNBURG, WALDBAUER

00501 LAB ARR

FINANCE

DEPARTMENT OFFICE 311 D K H

REQUIREMENTS FOR L. A. S. STUDENTS

MAJOR--TWENTY HOURS IN FINANCE. A FINANCE MAJOR WHO CHOOSES ECONOMICS AS A MINOR MUST INCLUDE ALSO TWELVE HOURS IN A SECOND MINOR.

ECON. 108 OR ECON. 102 AND 103, ARE FUNDAMENTAL COURSES IN ECONOMICS AND ARE PREREQUISITES FOR COURSES IN FINANCE. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN FINANCE SHOULD TAKE ECON. 108, OR ECON. 102 AND 103, IN THEIR SOPHOMORE YEAR. LIBERAL ARTS MAJORS IN FINANCE ARE ADVISED STRONGLY TO ELECT ACCY. 201 AND A COURSE IN STATISTICS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES IS ACCEPTED AS A MINOR.

COURSES FOR ADVANCED UNDERGRADUATES

FIN 250 MONEY, CREDIT, AND BANKING.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS
00502 LECT-DISC C 10 MTUWTHFS 123 D K H HEINS

FIN 254 BUSINESS FINANCE.
PREREQUISITE--ECON. 102 AND 103, OR 108, ACCY. 105 OR 201.
3 HOURS
00503 LECT-DISC A 8 MTUWTHFS 123 D K H LANDSEA
00504 LECT-DISC D 11 MTUWTHFS 123 D K H LEONARD

FIN 258 THE MONEY MARKET AND AMERICAN FINANCIAL INSTITUTIONS.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS
00505 LECT-DISC D 9 MTUWTHFS 123 D K H LEONARD

FIN 259 INVESTMENT.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS
00506 LECT-DISC D 11 MTUWTHFS 28 COM W HEINS

FIN 290 HONORS COURSE.
2 TO 4 HOURS
00507 CONF ARR OSBORN

FIN 294 SENIOR SEMINAR IN FINANCE, I.
PREREQUISITE--SENIOR STANDING, CONSENT OF DEPARTMENTAL ADVISOR.
*3 TO 5 HOURS
00508 CONF ARR OSBORN

COURSES FOR GRADUATES

FIN 454 CORPORATION FINANCE.
PREREQUISITE--FIN. 254.
1 UNIT
00509 LECT-DISC A 8-10 M TH 96 COM W OSBORN

FIN 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT
00510 CONF ARR OSBORN

FIN 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00511 LECT-DISC QTH 4-6 TH 420 D K H OSBORN

FOOD SCIENCE

DEPARTMENT OFFICE 213 M H

COURSES FOR GRADUATES

F S 481 ADVANCED STUDIES IN FOOD SCIENCE.
1/2 TO 2 UNITS
00512 CONF ARR STAFF

F S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00513 CONF ARR STAFF

DAIRY TECHNOLOGY

OFFICE 104 D M B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL STUDENTS SPECIALIZING IN DAIRY TECHNOLOGY ARE EXPECTED TO TAKE AN INSPECTION TRIP EITHER IN THE JUNIOR OR SENIOR YEAR. THIS TRIP COSTS THE STUDENT ABOUT $20.

COURSES FOR GRADUATES

D T 491 ASSIGNED PROBLEMS IN DAIRY TECHNOLOGY.
PREREQUISITE--GRADUATE STANDING IN DAIRY TECHNOLOGY.
1/2 TO 2 UNITS
00514 CONF ARR STAFF

D T 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00515 CONF ARR STAFF

FORESTRY

DEPARTMENT OFFICE 219 M H

COURSES FOR ADVANCED UNDERGRADUATES

THE FORESTRY COURSES FOR ADVANCED UNDERGRADUATES ARE DESIGNED PRIMARILY FOR STUDENTS WHO ARE CANDIDATES FOR THE PROFESSIONAL DEGREE OF BACHELOR OF SCIENCE IN FORESTRY IN EITHER THE FOREST PRODUCTION OR WOOD TECHNOLOGY AND UTILIZATION CURRICULUM. OTHER STUDENTS ARE ADMITTED TO MOST OF THESE COURSES, HOWEVER, IF THEY HAVE THE PREREQUISITES OR THE CONSENT OF THE INSTRUCTOR.

FOR 211 INTRODUCTION TO SILVICS AND SILVICULTURE--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
00516 CONF ARR BOGGESS, LORENZ

FOR 221 FOREST MENSURATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
00517 CONF ARR YOCOM

FOR 231 WOOD UTILIZATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
2 HOURS
00518 CONF ARR WALTERS

FRENCH

DEPARTMENT OFFICE 244 L H

MAJOR--TWENTY HOURS IN FRENCH, EXCLUDING FRENCH 101, 102, 103, 104, 113, AND INCLUDING FR. 201, 202, 211, 212 AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. STUDENTS ARE ALSO STRONGLY ADVISED TO TAKE A YEARS WORK--TWO COURSES IN EUROPEAN HISTORY AND A YEARS WORK--TWO COURSES--IN ENGLISH LITERATURE. COURSES PARTICULARLY SUITABLE FOR THIS PURPOSE ARE--
HIST. 111-112, 309-310, 311-312, 313-314, 323-324. ENGL.
101, 102, 103, 105, 106, 121, 122, 123, 131, 231, 232, 245, 246, 251, 252, 253, 257, 258, 263, 264, 281, 282, 283, 284,
HUMAN. 363, 364.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT IF TWO ARE CHOSEN--
EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR UNDERGRADUATES

FR 101 ELEMENTARY COURSE, I.
FOR STUDENTS WHO HAVE NO CREDIT IN FRENCH.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR FR. 101 WITHOUT FR. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,
00519 LECT-DISC 10-12 MTU THF 242 L H

FR 102 ELEMENTARY COURSE, II.
PREREQUISITE--FR. 101 OR ONE YEAR OF HIGH SCHOOL FRENCH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,
00520 LECT-DISC A1 8-10 MTU THF 216 L H
00521 LECT-DISC A2 8-10 MTU THF 302 L H

FR 103 MODERN FRENCH, I.
PREREQUISITE--FR. 102 OR TWO YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
00522 LECT-DISC A1 8-10 MTU THF 390 L H
00523 LECT-DISC A2 8-10 MTU THF 374 L H

FR 104 MODERN FRENCH, II.
PREREQUISITE--FR. 103 OR THREE YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
00524 LECT-DISC C1 10-12 MTU THF 302 L H
00525 LECT-DISC C2 10-12 MTU THF 374 L H

COURSES FOR ADVANCED UNDERGRADUATES

FR 202 INTRODUCTION TO FRENCH LITERATURE, II.
PREREQUISITE--FR. 104 OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS

00526	LECT-DISC		11	MTUWTHFS	325	G H	

FR 211 ORAL FRENCH, I
PREREQUISITE--FR. 104, OR 103 AND 113, OR FOUR YEARS OF HIGH SCHOOL FRENCH. PRACTICE IN LANGUAGE LABORATORY IS REQUIRED.
3 HOURS

00527	LECT-DISC	B1	9	MTUWTHFS	325	G H	
00528	LECT-DISC	B2	9	MTUWTHFS	308	L H	

FR 212 ORAL FRENCH, II
PREREQUISITE--FR. 211. WITH PERMISSION, FR. 212 MAY BE TAKEN WITH 211 IN THE SUMMER SESSION. PRACTICE IN LANGUAGE LABORATORY IS REQUIRED.
3 HOURS

00529	LECT-DISC		10	MTUWTHFS	325	G H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED UNDERGRADUATE COURSES IN FRENCH EXCEPT FR. 382 HAVE THE FOLLOWING PREREQUISITE--FR. 201 AND 202 OR EQUIVALENT.

FR 332 LE ROMAN FRANCAIS DU DIX-NEUVIEME SIECLE.
3 HOURS, OR 3/4 UNIT

00530	LECT-DISC		1	MTU THF	3	G H	KOLB

FR 335 CIVILISATION FRANCAISE, I.
3 HOURS - 3/4 UNIT

00531	LECT-DISC		10	W	232	L H	LAPREVOTTE, G
			11	MTUWTHF	232	L H	

FR 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS GER., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

00532	LECT-DISC		10	MTU THF	216	L H	NACHTMANN

COURSES FOR GRADUATES

FR 400 BEGINNING FRENCH FOR GRADUATE STUDENTS.
4 HOURS, NO GRADUATE CREDIT

00533	LECT-DISC	A1	8-10	MTU THF	392	L H	
00534	LECT-DISC	A2	8-10	MTU THF	232	L H	
00535	LECT-DISC	A3	8-10	MTU THF	207	G H	
00536	LECT-DISC	C	10-12	MTU THF	392	L H	
00537	LECT-DISC	G	3-5	MTU THF	392	L H	

FR 401 READING FRENCH FOR GRADUATE STUDENTS.
PREREQUISITE--FR. 400, OR FR. 101 AND 102, OR EQUIVALENT.
4 HOURS, NO GRADUATE CREDIT

00538	LECT-DISC	A	8-10	MTU THF	3	G H	
00539	LECT-DISC	C	10-12	MTU THF	3	G H	
00540	LECT-DISC	G	3-5	MTU THF	3	G H	

FR 410 ADVANCED SYNTAX.
PREREQUISITE--GRADUATE STANDING IN FRENCH.
1 UNIT

00541	LECT-DISC		8-10	M W F	242	L H	GRAY

FR 433 VILLON, RABELAIS.
PREREQUISITE--GRADUATE STANDING IN FRENCH.
1 UNIT

00542	LECT-DISC			MTU THF	219	G H	B BOWEN

FR 459 SEMINAR IN MODERN FRENCH LITERATURE--1870-1935.
*STUDENTS MAY RECEIVE CREDIT MORE THAN ONCE.
*1 UNIT
FOR 1965--LECONTE DE LISLE
00543 LECT-DISC 2-4 TU TH 207 G H KOLB

FR 460 SEMINAR IN FRENCH LITERATURE.
*COURSE MAY BE REPEATED FOR CREDIT.
1 UNIT
FOR 1965--JEAN-PAUL SARTRE
00544 LECT-DISC 2-4 M W 207 G H GRAY

FR 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN FRENCH.
1/4 TO 1 UNIT
STUDENTS PREPARING EITHER PART OF THE A.M. READING LIST
EXAMINATION MAY ELECT 491 FOR 1/2 UNIT.
00545 CONF ARR KNUDSON

FR 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00546 CONF ARR

GENERAL EDUCATION

STUDENTS WHO ENTER THE GENERAL CURRICULUM IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES OR WHO ENTER OTHER SCHOOLS AND SUBSEQUENTLY TRANSFER TO THE COLLEGE ARE REQUIRED TO COMPLETE AT LEAST ONE APPROVED SEQUENCE IN EACH OF THESE AREAS--HUMANITIES, BIOLOGICAL SCIENCE, PHYSICAL SCIENCE, AND SOCIAL SCIENCE.

THE FOLLOWING REGULATIONS APPLY TO THE FOREGOING SEQUENCES--

1--STUDENTS MUST COMPLETE AT LEAST ONE OF THESE SEQUENCES DURING THE FIRST YEAR OF STUDY.

2--STUDENTS WITH SOPHOMORE STANDING MUST COMPLETE AT LEAST ONE ADDITIONAL SEQUENCE DURING THE SECOND YEAR.

3--SOME OF THE SEQUENCES ARE AT THE ADVANCED LEVEL AND REQUIRE AT LEAST JUNIOR STANDING. SUCH COURSES COUNT TOWARD ADVANCED HOURS REQUIRED FOR GRADUATION.

4--A STUDENT NEED NOT SATISFY A SEQUENCE IN THE AREA IN WHICH HIS MAJOR DEPARTMENT IS CLASSIFIED. FOR EXAMPLE, IF HIS MAJOR IS CHEMISTRY, THE STUDENT DOES NOT TAKE A GENERAL EDUCATION SEQUENCE IN PHYSICAL SCIENCE. IF HIS MAJOR IS ENGLISH, THEN NO OTHER SEQUENCE IS REQUIRED IN HUMANITIES. THE SAME IS TRUE FOR OTHER AREAS. CONSEQUENTLY, A FRESHMAN SHOULD ENROLL IN A SEQUENCE WHICH DOES NOT DUPLICATE HIS INTENDED MAJOR, AND FINAL DECISION ON THE MAJOR FIELD SHOULD BE MADE AT THE BEGINNING OF THE SOPHOMORE YEAR IF POSSIBLE.

5--IN SO FAR AS POSSIBLE, THE SEQUENCES SHOULD BE CHOSEN FROM COURSES APPROVED BY THE COLLEGE. AUTHORITY FOR SUBSTITUTIONS IN THE SEQUENCE REQUIREMENTS MUST BE OBTAINED FROM ONE OF THE DEANS. THE FOLLOWING HAVE BEEN APPROVED.

BIOLOGICAL SCIENCE

D G S 131, 132
PHYSL 103 OR 203, PSYCH 103
OR 8 HOURS IN ANY TWO OF THE FOLLOWING--

BOT 100	PHYSL 103 OR 203
ENTOM 103	ZOOL 104
MCBIO 100 AND 101	

HUMANITIES

A SIX HOUR SEQUENCE IN ONE FOREIGN LITERATURE AT THE 200 AND 300 LEVEL--NOT LANGUAGE COURSES.

ART 111, 112, PLUS EITHER A 300 COURSE IN HISTORY OF ART OR PHIL 323
CLCIV 301, 302
D G S 161, 162
ENGL 101, 102, 103
ENGL 105, 106
ENGL 121, 122, 123
ENGL 251, 252, 253, 287
ANY TWO OR THREE OF THE FOUR COURSES, 6 OR 9 HOURS--
ENGL 338, 339, 340--ANY TWO OR ALL THREE COURSES, 6 OR 9 HOURS--
HIST 131, 132
HIST 323, 324
HUMAN 151, 152
HUMAN 211, 212, 215, 216
HUMAN 363, 364
MUSIC 130, 131 PLUS EITHER 312 OR 313
PHIL 101, 102, 105
PHIL 303, 306
RUSS 309, 310--6 HOURS--
SPEECH 177, 178

PHYSICAL SCIENCE

ASTR 101, 102
CHEM, ANY 8 HOURS
D G S 141, 142
GEOG 101, 111
GEOL 101, 102
MATH 118, 119 OR ANY 8 HOURS
PHYCS, ANY 8 HOURS

SOCIAL SCIENCE

ANTH 102, 103
D G S 121, 122
D G S 151, 152
D G S 171, 172
ECON 108, 210
ECON 108, 218
GEOG 104, 105
HIST 111, 112
HIST 151, 152
HIST 260, 261, 262
PHIL 103, 104
POL S 184, 191
POL S 191,192
PSYCH 100, 101
SOC 100, 104,
SOC 105, 218

A STUDENT MAY NOT USE MORE THAN ONE SEQUENCE FROM ANY ONE DEPARTMENT TO SATISFY THE GENERAL EDUCATION REQUIREMENTS.

A STUDENT MAY NOT USE MORE THAN ONE SIX-HOUR OR SEVEN-HOUR SEQUENCE TO SATISFY THE GENERAL EDUCATION REQUIREMENTS.

ANY STUDENT WHO HAS COMPLETED THE SIX COURSES PRESCRIBED BY THE DIVISION OF GENERAL STUDIES HAS SATISFIED ALL THE GENERAL EDUCATION SEQUENCE REQUIREMENTS IN THE SCIENCES AND LETTERS CURRICULUM.

GENERAL ENGINEERING

DEPARTMENT OFFICE 117 T B

SPECIAL SUMMER COURSE FOR HIGH SCHOOL STUDENTS

G E 010 SUMMER SCIENCE TRAINING PROGRAM FOR HIGH SCHOOL STUDENTS.
THIS PROGRAM IS DESIGNED TO FAMILIARIZE SELECTED HIGH SCHOOL STUDENTS WITH PAST ACHIEVEMENTS, CURRENT RESEARCH AND PRACTICE, AND FUTURE NEEDS IN SCIENCE AND ENGINEERING. ENROLLMENT IS LIMITED TO SUCCESSFUL APPLICANTS TO A 6 WEEK SUMMER SCIENCE TRAINING PROGRAM SPONSORED BY THE NATIONAL SCIENCE FOUNDATION TO BE HELD FROM JUNE 28 TO AUGUST 6. NO CREDIT

00547	LAB-DISC	A	8-12	MTUWTHF	201	T	B	DOBROVOLNY,
		A	1-4	MTUWTHF	201	T	B	REYES-GUERRA
		A	8-12	MTUWTHF	216	T	B	AND OTHERS
		A	1-4	MTUWTHF	216	T	B	

COURSES FOR UNDERGRADUATES

G E 103 ENGINEERING GRAPHICS, I.
3 HOURS

00548	LAB-DISC	A11	7-9	MTUWTHFS	114	T	B	NELSON
00549	LAB-DISC	B11	10-12	MTUWTHFS	114	T	B	PHILLIPS

COURSES FOR ADVANCED UNDERGRADUATES

G E 220 HISTORY OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS

00550	LECT-DISC	F	1-220	MTU THF	206	T	B	BORRI

G E 221 INTRODUCTION TO GENERAL ENGINEERING DESIGN.
PREREQUISITE--G. E. 103 AND 104, CREDIT OR REGISTRATION IN T.A.M. 150.
3 HOURS
*THIS SECTION IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER TRAINING PROGRAM SPONSORED BY THE UNITED STATES OFFICE OF EDUCATION FOR HIGH SCHOOL DRAFTING TEACHERS.

00551	LECT-DISC	*A1	8-10	M W F	302	T	B	OBRYANT AND
		*A1	8-11	TU TH	302	T	B	STERN

G E 293 SPECIAL PROBLEMS.
PREREQUISITE--JUNIOR STANDING AND CONSENT OF INSTRUCTOR.
4 HOURS SUMMER 1965 ONLY.
*SECTION A IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER TRAINING PROGRAM SPONSORED BY THE UNITED STATES OFFICE OF EDUCATION FOR HIGH SCHOOL DRAFTING TEACHERS. THIS SECTION COVERS APPLIED MATHEMATICS TO MECHANICAL SYSTEMS. CREDIT--4 HOURS.
*SECTION B IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN ACADEMIC YEAR INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR TEACHERS AND PROSPECTIVE TEACHERS OF MACHINE DESIGN TECHNOLOGY IN TECHNICAL INSTITUTES AND JUNIOR COLLEGES. THIS SECTION COVERS SPECIAL PROBLEMS IN ENGINEERING MATHEMATICS I AND WILL BE HELD FROM AUGUST 16 THROUGH SEPTEMBER 10, 1965. CREDIT--4 HOURS.

00552	LECT-DISC	*A	1-3	M W F	203	T	B	MARTIN
		*A	1	TU TH	203	T	B	
00553	LECT-DISC	*B	8-10	MTUWTHF	206	T	B	RIMBEY
		*B	1-3	M W F	206	T	B	

G E 393 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT
*SECTIONS A, B AND S ARE RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES. TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. SECTION A COVERS APPLIED MATHEMATICS FOR MECHANICAL SYSTEMS. CREDIT--4 HOURS OR 1 UNIT. SECTION B COVERS APPLIED MATHEMATICS IN ELECTRICAL CIRCUIT ANALYSIS. CREDIT--4 HOURS OR 1 UNIT. SECTION S IS A TECHNICAL EDUCATION SEMINAR. CREDIT--1 HOUR OR 1/4 UNIT.
*SECTION T IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER TRAINING PROGRAM SPONSORED BY THE UNITED STATES OFFICE OF EDUCATION FOR HIGH SCHOOL DRAFTING TEACHERS. THIS SECTION IS A TECHNICAL EDUCATION SEMINAR. CREDIT--1 HOUR OR 1/4 UNIT.

01242	LECT-DISC	*A	8	MTUWTHF	105	T	B	PLACEK
01243	LECT-DISC	*B	9	MTUWTHF	105	T	B	PLACEK
00555	LECT-DISC	*S	1-3	M W F	144	P	B	DOBROVOLNY AND OTHERS
00556	LECT-DISC	*T	2-4	TU TH	144	P	B	DOBROVOLNY AND OTHERS

GEOGRAPHY

MAJOR--TWENTY HOURS IN GEOGRAPHY IN ADDITION TO GEOGRAPHY 101. AT LEAST FIFTEEN OF THE TWENTY HOURS MUST BE IN COURSES CARRYING ADVANCED CREDIT. INDIVIDUAL PROGRAMS ARE ARRANGED FOR MAJOR STUDENTS WITH THE FOLLOWING SPECIAL INTERESTS--LIBERAL EDUCATION, BUSINESS, CARTOGRAPHY, GOVERNMENT, TEACHING, OR GRADUATE STUDY. THESE PROGRAMS INCLUDE DEPARTMENTAL COURSES, MINOR FIELDS, AND RECOMMENDED ELECTIVES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS IN DEPARTMENTS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED IN CONSULTATION WITH THE DEPARTMENTAL ADVISER AND WITH THE APPROVAL OF THE DEAN OF THE COLLEGE. AT LEAST EIGHT HOURS OF THE TWENTY MINOR HOURS MUST BE TAKEN IN EACH IF THE STUDENT ELECTS TO MINOR IN TWO DIFFERENT DEPARTMENTS.

DEPARTMENTAL DISTINCTION--STUDENTS ELIGIBLE FOR GRADUATION WITH HONORS IN LIBERAL ARTS AND SCIENCES SHOULD CONSULT WITH THE DEPARTMENTAL ADVISER CONCERNING GRADUATION WITH DISTINCTION IN GEOGRAPHY.

COURSES FOR UNDERGRADUATES

GEOG 101 ELEMENTS OF GEOGRAPHY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

00557	LECT	B	9	MTUWTH	323	D	H	BOOTH
00557	QUIZ	B	3-5	TUWTH	323	D	H	

GEOG 111 INTRODUCTORY METEOROLOGY.
PREREQUISITE--GEOG. 101 OR CONSENT OF INSTRUCTOR.
3 HOURS

00558	LECT-DISC		750-850	MTUWTHF	323	D	H	PAGE

GEOG 185 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS.
SAME AS ANTH. AND SOC. 185.
PREREQUISITE--SOC. 100, OR CONSENT OF INSTRUCTOR, OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS

00559	LECT-DISC	A	9-11	TU TH	314	L	H	SIMMONS
00560	LECT-DISC	B	ARR					

COURSES FOR ADVANCED UNDERGRADUATES

GEOG 214 CONSERVATION OF NATURAL RESOURCES.
3 HOURS

00561	LECT-DISC	D	11	MTUWTH	323	D H	BOOTH
		D	11-1	F	323	D H	

GEOG 272 INTRODUCTORY FIELD GEOGRAPHY.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
5 TO 8 HOURS DEPENDING ON DURATION OF CAMP.

00562	LAB	ARR	
	FIELD CAMP	METROPOLIS, ILLINOIS	ALEXANDER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOG 332 GEOGRAPHY OF SOUTH AMERICA.
PREREQUISITE--EIGHT HOURS OF GEOGRAPHY, ENROLLMENT IN LATIN-AMERICAN STUDIES PROGRAM, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

00563	LECT-DISC	C	10	MTUWTHF	323	D H	PAGE
		C	1	M	323	D H	

GEOG 371 INTRODUCTION TO RESEARCH, I.
PREREQUISITE--GEOGRAPHY MAJOR OR SENIOR STANDING WITH A MINIMUM OF 12 HOURS OF GEOGRAPHY.
3 HOURS, OR 1/2 UNIT

00564	LECT-DISC	ARR	FELLMANN

COURSES FOR GRADUATES

GEOG 478 ADVANCED FIELD GEOGRAPHY.
PREREQUISITE--GRADUATE STANDING IN GEOGRAPHY.
1 1/4 TO 2 UNITS

00565	LAB	ARR	
	FIELD CAMP	METROPOLIS, ILLINOIS	ALEXANDER

GEOG 495 ADVANCED STUDIES IN GEOGRAPHY.
1/2 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELD--

	U.S.S.R.	FELLMANN
	URBAN	FELLMANN
	HISTORICAL	FELLMANN
	PROBLEMS OF GEOGRAPHIC STUDY	STAFF
00566	CONF	ARR	STAFF

GEOG 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00567	CONF	ARR	STAFF

DEPARTMENT OFFICE 234 N H

MAJOR--TWENTY HOURS IN GEOLOGY, EXCLUDING GEOL. 101, PHYSICAL GEOLOGY, 105, AGRICULTURAL GEOLOGY, AND 150, GEOLOGY FOR ENGINEERS. THE FOLLOWING COURSES, IN ADDITION TO GEOL. 101, PHYSICAL GEOLOGY, ARE FUNDAMENTAL FOR A MAJOR IN GEOLOGY--102, HISTORICAL GEOLOGY, 131 AND 132, MINERALOGY, 301, GEOMORPHOLOGY, 311, STRUCTURAL GEOLOGY 320, PALEONTOLOGY, 321, STRATIGRAPHY, 317, FIELD GEOLOGY IN THE ROCKY MOUNTAINS, G E 205, APPLIED DESCRIPTIVE GEOMETRY IN GEOLOGICAL PROBLEMS, CHEM. 101 OR 102, GENERAL CHEMISTRY, PHYSICS 101, GENERAL PHYSICS, MATH. 112, COLLEGE ALGEBRA, MATH. 114, TRIGONOMETRY, AND MATH. 123 OR 122, ANALYTIC GEOMETRY.

STUDENTS ARE ADVISED TO TAKE MATH. 132 AND 142, OR MATH. 133 AND 143 CALCULUS, AND PHYSICS 102, GENERAL PHYSICS.

STUDENTS WHOSE PRIMARY INTEREST IS MINERALOGY, PETROLOGY, AND MINERAL DEPOSITS SHOULD ALSO TAKE CHEM. 105, INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS, AND CHEM. 245 AND 246, PHYSICAL CHEMISTRY FOR ENGINEERS, OR THE EQUIVALENT. IT IS ALSO ADVISABLE FOR SUCH STUDENTS TO TAKE GEOL. 335, OPTICAL MINERALOGY, AND GEOL. 336, PETROGRAPHY, DURING THE SENIOR YEAR.

MINORS--TWENTY HOURS CHOSEN FROM ONE OR TWO OF THE FOLLOWING SUBJECTS--ASTRONOMY, BOTANY, CHEMISTRY, CIVIL ENGINEERING, ECONOMICS GEOGRAPHY, MATHEMATICS, MINING ENGINEERING, PHYSICS, AND ZOOLOGY, AFTER CONSULTATION WITH THE DEPARTMENT OF GEOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

DEPARTMENTAL DISTINCTION--ONLY THOSE STUDENTS WHO HAVE CREDIT IN GEOL. 290 AND WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. EACH STUDENT WHO DESIRES TO REGISTER MUST OBTAIN A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK AND PRESENT IT TO THE HEAD OF THE DEPARTMENT AT THE TIME OF REGISTRATION.

NOTE--CERTAIN GEOLOGY COURSES ARE OFFERED ONLY IN ALTERNATE YEARS--324, VERTEBRATE PALEONTOLOGY, 401, ADVANCED DYNAMIC GEOLOGY, 402, ADVANCED HISTORICAL GEOLOGY, 428, PALYNOLOGY.

AT LEAST ONE YEAR OF GRADUATE WORK IS NECESSARY AS FURTHER TRAINING FOR ALL PROFESSIONAL WORK IN GEOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

GEOL 290 INTRODUCTION TO RESEARCH.
CREDIT TO BE ARRANGED.
00568 CONF &A ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOL 317 FIELD GEOLOGY IN THE ROCKY MOUNTAINS.
PREREQUISITE--GEOL. 102 AND CONSENT OF INSTRUCTOR.
FIELD TRIP, APPROXIMATE COST $250 TO $305.
8 HOURS, OR 2 UNITS
00569 LAB-DISC ARR JOHNSON AND OTHERS

COURSES FOR GRADUATES

GEOL 493 ADVANCED STUDIES IN GEOLOGY.
1/2 TO 2 UNITS

CLAY MINERALOGY	GRIM
ENGINEERING GEOLOGY	DEERE, RICHARDS
GEOMORPHOLOGY AND GLACIAL GEOLOGY	SHAFFER, WHITE
GEOTECTONICS	CAROZZI
GROUND-WATER GEOLOGY	FARVOLDEN
MICROPALEONTOLOGY	SCOTT
MINERAL DEPOSITS	HAGNER
MINERALOGY AND CRYSTALLOGRAPHY	HENDERSON
PALEOBOTANY--SEE BOT. 493	STEWART
PALEONTOLOGY	HAY, SCOTT
PENNSYLVANIAN STRATIGRAPHY	WANLESS
PETROGRAPHY AND PETROLOGY	CHAPMAN
SEDIMENTARY PETROLOGY	CAROZZI, RICHARDS, WANLESS
STRATIGRAPHY	LANGENHEIM, SCOTT, DENNISON

00570 CONF ARR STAFF

GEOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00571 CONF ARR STAFF

GERMANIC LANGUAGES AND LITERATURES

DEPARTMENT OFFICE 371 L H

MAJOR--TWENTY HOURS IN GERMAN, EXCLUDING GERMAN 101, 102, 103, 104 AND 113, AND INCLUDING AT LEAST SIX HOURS IN COURSES IN THE 300 GROUP--NORMALLY 301 AND 302--OR EQUIVALENT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO SUBJECTS CHOSEN FROM THE FOLLOWING LIST, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT--EDUCATION ENGLISH--EXCLUDING RHET. 101, 102, AND 200--FRENCH, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, LINGUISTICS--EXCLUDING LING. 301--MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, RUSS. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT LANGUAGE.

COURSES FOR UNDERGRADUATES

GER 101 ELEMENTARY COURSE, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR GER. 101 WITHOUT GER. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS TIME TO BE ARRANGED.

00572	LECT-DISC	A1	8-10	MTUWTH	370	L H
00573	LECT-DISC	A2	8-10	MTUWTH	388	L H

GER 102 ELEMENTARY COURSE, II.
PREREQUISITE--GER. 101 OR ONE YEAR OF HIGH SCHOOL GERMAN.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR TWO HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY--TIME TO BE ARRANGED.

00574	LECT-DISC	C1	10-12	MTUWTH	370	L H
00575	LECT-DISC	C2	10-12	MTUWTH	388	L H

GER 103 INTERMEDIATE COURSE, I.
PREREQUISITE--GER. 102, TWO YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
STUDENTS MUST REGISTER FOR ONE HOUR OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

00576	LECT-DISC	A	8-10	MTUWTH	186	L	H	LORBE

GER 104 INTERMEDIATE COURSE, II.
PREREQUISITE--GER. 103, OR THREE YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS

00577	LECT-DISC	C1	10-12	MTUWTH	186	L	H	FOULKES
00578	LECT-DISC	C2	10-12	MTUWTH	162	L	H	

COURSES FOR ADVANCED UNDERGRADUATES

GER 210 MASTERPIECES OF GERMAN LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GERMAN OR EQUIVALENT.
3 HOURS

00579	LECT-DISC	A	8-10	M W F	261	L	H	STEGEMEIER

GER 211 CONVERSATION AND WRITING, I.
PREREQUISITE--GER. 103 AND 113, OR GER. 104, OR EQUIVALENT.
3 HOURS

00580	LECT-DISC	C	10-12	M W F	261	L	H	LORBE

GER 291 SENIOR THESIS AND HONORS COURSE.
PREREQUISITE--SENIOR STANDING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

00581	CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GER 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

00582	LECT-DISC		10	MTU THF	216	L	H	NACHTMANN

COURSES FOR GRADUATES

GER 400 BEGINNING GERMAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.

00583	LECT-DISC	A1	8-10	MTUWTH	111	G	H	VANDENBERGH
00584	LECT-DISC	A2	8-10	MTUWTH	329	G	H	
00585	LECT-DISC	C1	10-12	MTUWTH	111	G	H	MILLER
00586	LECT-DISC	C2	10-12	MTUWTH	329	G	H	
00587	LECT-DISC	L	7-9PM	MTUWTH	111	G	H	VANDENBERGH

GER 401 READINGS IN GERMAN FOR GRADUATE STUDENTS.
PREREQUISITE--GER. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
*SECTIONS C, E2, AND L2 DO READINGS PARTICULARLY IN THE HUMANITIES AND THE SOCIAL SCIENCES, SECTIONS A, E1, L1, AND L3 IN THE NATURAL SCIENCES.

00588	LECT-DISC	A	8-10	M W F	221	G	H	NOCK
00589	LECT-DISC	C	10-12	M W F	221	G	H	
00590	LECT-DISC	E1	1-3	M WTH	111	G	H	
00591	LECT-DISC	E2	1-3	M WTH	221	G	H	GEORGE
00592	LECT-DISC	L1	7-9PM	M WTH	329	G	H	
00593	LECT-DISC	L2	7-9PM	M WTH	221	G	H	GEORGE
00594	LECT-DISC	L3	7-9PM	M WTH	370	L	H	FOULKES

GER 493 RESEARCH IN SPECIAL TOPICS.
1 TO 4 UNITS
00595 LECT-DISC ARR STEGEMEIER

GER 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
00596 CONF ARR STAFF

GREEK

DEPARTMENT OFFICE 360 L H

MAJOR--TWENTY HOURS. IN ADDITION CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, LATIN BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

CREDIT FOR NEW TESTAMENT GREEK TRANSFERRED FROM OTHER INSTITUTIONS IS NOT COUNTED TOWARD A MAJOR OR MINOR UNTIL AFTER THE SATISFACTORY COMPLETION OF GREEK 201-202 AND THEN ONLY TO A POSSIBLE MAXIMUM OF EIGHT HOURS AS THE EQUIVALENT OF GREEK 101-102 AND THREE HOURS AS THE EQUIVALENT OF ONE SEMESTER OF GREEK 391.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GRK 391 READINGS IN GREEK LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GREEK, CONSENT OF INSTRUCTOR.
*MAY BE REPEATED FOR MAXIMUM OF 12 HOURS CREDIT.
*3 HOURS, OR 3/4 UNIT
00597 LECT-DISC A 11 MTUWTHFS 362 L H NAOUMIDES

COURSES FOR GRADUATES

UNLESS OTHERWISE NOTED, THE PREREQUISITE TO ALL COURSES IS THREE YEARS OF COLLEGE GREEK.

GRK 491 DIRECTED READING.
PREREQUISITE--SECOND YEAR GRADUATE STUDENT.
1/2 UNIT
00598 CONF ARR 360 L H SMITH

GRK 499 THESIS RESEARCH.
SAME AS LAT. 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00599 CONF ARR 360 L H STAFF

HEALTH EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

H ED 281 FIRST AID.
2 HOURS

00600	LECT-DISC	D	11	MTUWTH	211	H G	BOYS

H ED 282 ORGANIZATION OF SCHOOL HEALTH PROGRAMS.
3 HOURS

00601	LECT-DISC	A	7-9	M	207	H G	HOYMAN
		A	8	TUWTHF	207	H G	HOYMAN

COURSES FOR GRADUATES

H ED 404 TRENDS AND ISSUES IN SEX EDUCATION.
PREREQUISITE--UNDERGRADUATE COURSES IN BIOLOGICAL AND SOCIAL SCIENCES OR CONSENT OF INSTRUCTOR.
1 UNIT

00602	LECT-DISC		9	MTUWTH	207A	H G	HOYMAN

H ED 490 SEMINAR.
NO CREDIT

00603	LECT-DISC	ARR	BOYS

H ED 499 THESIS RESEARCH.
1/2 TO 2 UNITS

00604	CONF	ARR	STAFF

HISTORY

DEPARTMENT OFFICE 359 ARMORY

MAJOR--TWENTY HOURS IN HISTORY, INCLUDING AT LEAST TEN HOURS IN COURSES HAVING JUNIOR STANDING AS A PREREQUISITE, AND NOT INCLUDING MORE THAN FOUR HOURS IN COURSES OPEN TO FRESHMEN. THE COURSES OFFERED MUST INCLUDE AT LEAST SIX HOURS IN AMERICAN HISTORY, SIX HOURS IN MODERN EUROPEAN HISTORY SINCE 1500, AND SIX HOURS IN OTHER FIELDS OF HISTORY.

MINORS--TWENTY HOURS, NOT INCLUDING MORE THAN FOUR HOURS OPEN TO FRESHMEN, IN ONE OR TWO OF THE FOLLOWING--ANCIENT OR MODERN LANGUAGE EXCLUDING ELEMENTARY COURSES 101 AND 102, ANTHROPOLOGY, ECONOMICS, ENGLISH AND AMERICAN LITERATURE, GEOGRAPHY, LAW, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN AMERICAN STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, ASIAN STUDIES OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR, EXCLUDING THE COURSES IN HISTORY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 121 AND 122, HISTORY OF CIVILIZATION, ARE ACCEPTED AS SATISFYING THE PREREQUISITE OF A YEAR OF COLLEGE HISTORY IN ALL CASES IN WHICH IT IS REQUIRED.

HIST 111 HISTORY OF MODERN CIVILIZATION TO 1815.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

00605	LECT		9	MTUWTH	428	ARMORY	DMYTRYSHYN
00606	DISC	A	11	MTUWTH	329	ARMORY	
00607	DISC	B	1	MTUWTH	333	ARMORY	

HIST 152 HISTORY OF THE UNITED STATES FROM 1865 TO THE PRESENT.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 152 AND 262.
*4 HOURS

00608	LECT		8	MTUWTH	319	G H	STONE
00609	DISC	A	9	MTUWTH	333	ARMORY	
00610	DISC	B	9	MTUWTH	329	ARMORY	
00611	DISC	C	10	MTUWTH	333	ARMORY	
00612	DISC	D	10	MTUWTH	329	ARMORY	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ONE YEAR OF COLLEGE HISTORY IS REQUIRED EXCEPT WHERE NOTED.

HIST 302 THE MIDDLE AGES, 1100 TO 1500 A.D.
3 HOURS, OR 1/2 OR 1 UNIT

00613	LECT	9	MTUWTHFS	430	ARMORY	GEANAKOPLOS

HIST 309 DEVELOPMENT OF MODERN EUROPE--ABSOLUTISM AND COLONIAL EXPANSION 1648 TO 1789.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00614	LECT	10	MTUWTHFS	430	ARMORY	SIRICH

HIST 328 HISTORY OF SOVIET RUSSIA FROM 1917 TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00615	LECT	11	MTUWTHFS	333	ARMORY	DMYTRYSHYN

HIST 333 GREAT BRITAIN UNDER THE TUDORS AND STUARTS, 1485-1660.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00616	LECT	11	MTUWTHFS	428	ARMORY	LEE

HIST 357 SOCIAL AND ECONOMIC HISTORY OF THE UNITED STATES, 1775 TO 1860.
3 HOURS, OR 1/2 OR 1 UNIT

00617	DISC	11	MTUWTHFS	430	ARMORY	DODDS

361 HISTORY OF THE UNITED STATES, 1909-1932
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY, POLITICAL SCIENCE, OR ECONOMICS.
3 HOURS, OR 1/2 OR 1 UNIT

00618	LECT	10	MTUWTHFS	433	ARMORY	STONE

HIST 367 THE TRANS-MISSISSIPPI WEST.
3 HOURS, OR 1/2 OR 1 UNIT

00619	LECT	10	MTUWTHFS	428	ARMORY	SPENCE

COURSES FOR GRADUATES

HIST 401 SEMINAR IN MEDIEVAL HISTORY.
1 UNIT
00620 DISC 3-5 TU TH 424A LIB GEANAKOPLOS

HIST 411 THE FRENCH REVOLUTION AND NAPOLEON.
1 UNIT
00621 DISC 1-3 M W 303 ARMORY SIRICH

HIST 432 SEMINAR IN ENGLISH HISTORY.
1 UNIT
00622 DISC 1-3 TU TH 303 ARMORY LEE

HIST 452 SEMINAR IN AMERICAN HISTORY.
1 UNIT
3-5 M W 303 ARMORY DODDS

HIST 461 SEMINAR IN RECENT AMERICAN HISTORY.
1 UNIT
00624 DISC 3-5 TU TH 303 ARMORY BATES

HIST 495 HISTORICAL METHOD.
1 UNIT
00625 LECT 8 MTUWTH 333 ARMORY SPENCE

HIST 497 READING COURSE.
PREREQUISITE--MASTERS DEGREE OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT
00626 CONF ARR STAFF

HIST 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00627 CONF ARR STAFF

HISTORY AND PHILOSOPHY OF EDUCATION

DEPARTMENT OFFICE 369 EDUC

COURSES FOR ADVANCED UNDERGRADUATES

HP ED 201 FOUNDATIONS OF AMERICAN EDUCATION.
PREREQUISITE--EL. ED. 101 OR SE. ED. 101 OR VO. TEC. 101, PSYCH. 100
2 HOURS
*HONORS SECTION. RESERVED FOR JAMES SCHOLARS, STUDENTS WHO HAVE RECEIVED UNIVERSITY HONORS, COLLEGE HONORS OR CLASS HONORS, OR STUDENTS WHO HAVE RECEIVED THE CONSENT OF THE INSTRUCTOR.
00628 LECT-DISC A 8 TUWTHF 1 G H
00629 LECT-DISC B 9 TUWTHF 205 G H
00630 LECT-DISC C 10 TUWTHF 205 G H
00631 LECT-DISC *&D 11 TUWTHF 1 G H METCALF

HP ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS
00632 CONF ARR STAFF

HP ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS
00633 CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

HP ED 301 PHILOSOPHY OF EDUCATION.
2 HOURS, OR 1/2 UNIT

00634	LECT-DISC	9	TUWTHF	331	ARMORY	MCMURRAY

HP ED 302 HISTORY OF AMERICAN EDUCATION.
2 HOURS, OR 1/2 UNIT

00635	LECT-DISC	10	TUWTHF	1	G H	WILLERS

HP ED 303 COMPARATIVE EDUCATION.
2 HOURS, OR 1/2 UNIT

00636	LECT-DISC	11	TUWTHF	1	EDUC	KAULFERS

HP ED 304 SOCIAL FOUNDATIONS OF EDUCATION.
2 HOURS, OR 1/2 UNIT
*THIS SECTION IS LIMITED TO STUDENTS IN SCHOOL FOR FOUR WEEKS ONLY.
OTHERS ADMITTED ONLY BY PERMISSION OF THE INSTRUCTOR.

00637	LECT-DISC	A1	8	TUWTHF	192	EDUC	SMITH
00638	LECT-DISC	A2	8	TUWTHF	205	G H	PALMER
00639	LECT-DISC	B1	9	TUWTHF	192	EDUC	
00640	LECT-DISC	B2	9	TUWTHF	137	ARMORY	
00644	LECT-DISC	*C1	10-12	TUWTHF	432	ARMORY	SMITH
00641	LECT-DISC	C2	10	TUWTHF	192	EDUC	PALMER
00642	LECT-DISC	D1	11	TUWTHF	170	COM W	
00643	LECT-DISC	D2	11	TUWTHF	429	ARMORY	

HP ED 305 HISTORY OF EDUCATIONAL IDEAS.
2 HOURS, OR 1/2 UNIT

00645	LECT-DISC	A	8	TUWTHF	43	G H	
00646	LECT-DISC	B1	9	TUWTHF	162	EDUC	KAULFERS
00647	LECT-DISC	B2	9	TUWTHF	43	G H	
00648	LECT-DISC	C1	10	TUWTHF	43	G H	
00649	LECT-DISC	C2	10	TUWTHF	28	COM W	
00650	LECT-DISC	D1	11	TUWTHF	137	ARMORY	MCMURRAY
00651	LECT-DISC	D2	11	TUWTHF	205	G H	WILLERS

COURSES FOR GRADUATES

HP ED 410 SEMINAR IN THEORIES OF EDUCATIONAL AND SOCIAL CHANGE.
ONLY OPEN TO CANDIDATES FOR THE ED. D. OR PH. D. IN EDUCATION.
1 UNIT

00652	LECT-DISC	1-3	TU TH	389	EDUC	BROUDY, STANLEY

HP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

00653	CONF	ARR	STAFF

HP ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION
FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

00654	CONF	ARR	STAFF

HP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

00655	CONF	ARR	STAFF

HP ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

00656	CONF	ARR	STAFF

HOME ECONOMICS

DEPARTMENT OFFICE 260 BEV HALL

NOTE--HOME ECONOMICS COURSES DESIGNED PARTICULARLY FOR NON-MAJOR STUDENTS AND NOT FULFILLING THE REQUIREMENTS FOR A MAJOR IN HOME ECONOMICS ARE HOME ECON. 120, 125, 193, 196, AND 271.

OTHER HOME ECONOMICS COURSES ARE ALSO OPEN TO NON-MAJORS WHO HAVE THE PREREQUISITES LISTED FOR THE COURSE AND THE CONSENT OF THE INSTRUCTOR. STUDENTS ARE REFERRED PARTICULARLY TO H.EC. 105, 132, 133, 160, 171, 182, 183, 184, 202, 210, 260, 263, 270, 285, 286, AND 305.

COURSES FOR UNDERGRADUATES

H EC 183 CONSUMER TEXTILES.
2 HOURS

00657	LAB	8-10	MTUWTH	208	BEV HALL	TREBILCOCK

COURSES FOR ADVANCED UNDEKGRADUATES AND GRADUATES

H EC 330 EXPERIMENTAL FOODS.
PREREQUISITE--H. EC. 231, MCBIO. 100, 101.
*FOR 1 UNIT TWO ADDITONAL HOURS WILL BE SCHEDULED.
*3 HOURS, OR 1/2 OR 1 UNIT
FIRST FOUR WEEKS--JUNE 21-JULY 16.

00658	LECT	1	MTUWTHF	328	BEV HALL	JANSSEN
00658	LAB	2-5	MTUWTHF	362	BEV HALL	JANSSEN

H EC 351 SPECIAL PROBLEMS IN GROUP FEEDING.
PREREQUISITE--H. EC. 220, 231, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR H. EC. 351 IN ADDITION TO H. EC. 240, 345, OR 350.
*3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS--JUNE 21 TO JULY 16.

00659	LAB-DISC	8-1230	MTUWTHF	292	BEV HALL	HUNZICKER, LARSON

H EC 375 HOME EQUIPMENT.
PREREQUISITE--H. EC. 171, SIX ADVANCED HOURS IN HOME ECONOMICS INCLUDING ONE OF THE FOLLOWING--H. EC. 231, 273, 380, SENIOR STANDING, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
SECOND FOUR WEEKS--JULY 19-AUGUST 14.

00660	LECT	8	TUWTHF	166	BEV HALL	ANDERSON
00660	LAB	9-11	TUWTHF	166	BEV HALL	ANDERSON

H EC 378 PROBLEMS IN HOME MANAGEMENT.
PREREQUISITE--H. EC. 270 OR 262, CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
FIRST FOUR WEEKS--JUNE 16-JULY 11.

00661	CONF	ARR	GOODYEAR

H EC 388 PROBLEMS IN TEXTILES AND CLOTHING.
PREREQUISITE--H. EC. 286 OR 380, OR MKTG. 211, MINIMUM GRADE POINT AVERAGE OF 3.5, SENIOR STANDING IN HOME ECONOMICS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00662	CONF	ARR	GALBRAITH

COURSES FOR GRADUATES

H EC 410 PROBLEMS IN FAMILY LIVING.
PREREQUISITE--H. EC. 210.
1 UNIT
00663 DISC 11 TUWTHF 449 BEV HALL

H EC 487 SEMINAR IN CLOTHING.
PREREQUISITE--UNDERGRADUATE CURRICULUM WITH MAJORS IN TEXTILES AND CLOTHING, HOME ECONOMICS EDUCATION, HOME ECONOMICS EXTENTION OR GENERAL HOME ECONOMICS.
1/2 OR 1 UNIT
00664 DISC 1 TUWTHF 154 BEV HALL TREBILCOCK

H EC 493 ADVANCED STUDIES IN HOME ECONOMICS.
1/2 OR 1 UNIT
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--THE CHILD AND THE FAMILY
B--FAMILY AND CONSUMPTION ECONOMICS
C--FOODS
D--NUTRITION
E--TEXTILES AND CLOTHING
00665 CONF ARR STAFF

H EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--THE CHILD AND THE FAMILY	MILLS
B--FAMILY AND CONSUMPTION ECONOMICS	DUNSING
C--FOODS	VAN DUYNE
D--NUTRITION	SMITH
E--TEXTILES AND CLOTHING	GALBRAITH

00666 CONF ARR

HORTICULTURE

COURSES FOR ADVANCED UNDERGRADUATES

HORT 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5. NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR A THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--POMOLOGY	LOTT, SIMONS, TITUS, ZYCH
B--VEGETABLE CROPS	ARNOLD, MCCOLLUM, THOMPSON VANDEMARK
C--FLORICULTURE	BEEVERS, BUTLER, CULBERT, FOSLER GARTNER, HODGES NELSON
D--FRUIT BREEDING	BIRKELAND, DAYTON
E--APICULTURE	JAYCOX

00667 CONF ARR STAFF

COURSES FOR GRADUATES

HORT 492 SPECIAL TOPICS IN HORTICULTURE.
PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
1/2 TO 2 UNITS
00668 CONF ARR STAFF

HORT 499 THESIS RESEARCH.
REQUIRED FOR MAJOR IN HORTICULTURE. PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--FLORICULTURE	BEEVERS, GULBERT, GARTNER, HODGES
B--FRUIT BREEDING	BARRETT, BIRKELAND, DAYTON
C--POMOLOGY	JAYCOX, LOTT, SIMONS, TITUS
D--VEGETABLE CROPS	ARNOLD, MCCOLLUM, RHODES, THOMPSON, VANDEMARK

00669 CONF ARR STAFF

HEALTH SCIENCE

HEALTH SCIENCE

DEPARTMENT OFFICE HEALTH CENTER

COURSES FOR ADVANCED UNDERGRADUATES

HL SC 200 MENTAL HEALTH.
2 HOURS
00670 LECT-DISC A 11 MTUWTH 393 BEV HALL

HL SC 206 SEX EDUCATION AND FAMILY LIFE.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS
INSTRUCTORS TEACHING HL. SC. 206 ARE AKERS, BENTZ, CAVINS, MILLER, NICHOLS, AND TEIGLER.
00671 LECT-DISC A 9 MTUWTH 393 BEV HALL TEIGLER

ITALIAN

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN ITALIAN, EXCLUDING ITALIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. HISTORY 217, LINGUISTICS 300 AND ITALIAN 291 AND 292 ARE ACCEPTABLE. ITALIAN 291 AND 292 FOR MAJORS CAN BE ARRANGED FOR ADVANCED GROUP CREDIT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--
EDUCATION, ENGLISH, EXCLUDING RHET. 101 AND 102, FRENCH, GERMAN, GREEK, HISTORY, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR GRADUATES

```
ITAL  491     SPECIAL TOPICS IN ITALIAN.
        1/2 OR 1 UNIT
       00672   CONF            ARR                                          BRANCAFORTE

ITAL  499     THESIS RESEARCH.
        0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
       00673   CONF            ARR                                          ALLEN
```

JOURNALISM

```
        DEPARTMENT OFFICE                                  120 A G H
```

COURSES FOR ADVANCED UNDERGRADUATES

```
JOURN 291     SPECIAL PROBLEMS.
        PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
        2 OR 3 HOURS
       00674   CONF            ARR                        120A G H          JENSEN
```

COURSES FOR GRADUATES

```
JOURN 473     HISTORY AND THEORY OF FREEDOM OF THE PRESS.
              SAME AS COMM. 473.
        1 UNIT
       00675   LECT-DISC         10-12       TU TH    123  G H             CAREY

JOURN 490     SPECIAL TOPICS IN JOURNALISM.
        PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
        1/2 OR 1 UNIT
       00676   CONF            ARR                        120A G H          JENSEN

JOURN 499     THESIS RESEARCH.
        PREREQUISITE--GRADUATE STANDING IN JOURNALISM.
        1 TO 2 UNITS
       00677   CONF            ARR                        120A G H          STAFF
```

LABOR AND INDUSTRIAL RELATIONS

```
              DEPARTMENT OFFICE                    504 E ARMORY, C.
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
L I R 312     HUMAN RELATIONS IN BUSINESS.
              SAME AS MGMT. 312.
        PREREQUISITE--MGMT. 101 OR EQUIVALENT.
        3 HOURS, OR 1/2 OR 3/4 UNIT
       00678   LECT-DISC  D      11        MTUWTHF   160  COM W
                          D       3            TH    160  COM W
```

COURSES FOR GRADUATES

L I R 440 LABOR ECONOMICS.
SAME AS ECON. 440.
PREREQUISITE--A MINIMUM OF SIX HOURS IN ECONOMICS.
1 UNIT
00679 LECT-DISC 1-3 TU F 130 COM W MCNATT

L I R 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS MGMT. 448.
PREREQUISITE--MGMT. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT
00680 LECT-DISC 1-3 M TH 160 COM W YOUNG

L I R 490 INDIVIDUAL TOPICS.
1/2 TO 2 UNITS
00681 CONF ARR STAFF

L I R 499 THESIS RESEARCH.
1/2 TO 2 UNITS
00682 CONF ARR STAFF

LANDSCAPE ARCHITECTURE

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

L A 436 ADVANCED LANDSCAPE DESIGN.
PREREQUISITE--BACHELORS DEGREE IN LANDSCAPE ARCHITECTURE.
1 TO 2 UNITS
00683 LAB 8-12 MTUWTHF 1203 W CALIF STAFF

L A 499 THESIS RESEARCH.
1/2 TO 2 UNITS
00684 CONF ARR STAFF

LATIN

DEPARTMENT OFFICE 360 L H

MAJOR--TWENTY HOURS, EXCLUDING LATIN 101, 102, AND 103, AND INCLUDING SIX HOURS IN TRANSLATION COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES. IN ADDITION, CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE. SEE ALSO THE SPECIALIZED CURRICULUM PREPARATORY TO THE TEACHING OF LATIN.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, GREEK BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LAT 391 READINGS IN LATIN LITERATURE.
PREREQUISITE--THREE YEARS OF COLLEGE LATIN OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS.
*3 HOURS, OR 3/4 UNIT
00685 LECT-DISC A 9 MTUWTHFS 362 L H BATEMAN

COURSES FOR GRADUATES

LAT 409 HISTORY OF THE LATIN LANGUAGE.
PREREQUISITE--TWO YEARS OF COLLEGE LATIN OR EQUIVALENT, TWO YEARS OF A MODERN FOREIGN LANGUAGE.
1 UNIT
00686 LECT-DISC 130-3 M W F 394 L H HELLER

LAT 499 THESIS RESEARCH.
SAME AS GRK. 499.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00687 CONF ARR 360 L H STAFF

LATIN AMERICAN STUDIES PROGRAM

DEPARTMENT OFFICE 316 - 1207 W OREGON

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

STUDENTS MAY ELECT THE LATIN AMERICAN STUDIES PROGRAM AS EITHER A MAJOR OR A MINOR. IN BOTH CASES STUDENTS FOLLOW THE SAME PROGRAM. STUDENTS WHO ELECT LATIN AMERICAN STUDIES AS A MAJOR OR MINOR SHALL BE REQUIRED TO--

1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE SCIENCES AND LETTERS CURRICULUM.

2-COMPLETE SIX SEMESTERS OR EQUIVALENT OF COLLEGE SPANISH OR PORTUGUESE. IF A STUDENT WISHES TO TAKE BOTH SPANISH AND PORTUGUESE HE MAY TAKE TWO YEARS OF EACH TO SATISFY THIS REQUIREMENT. IN THE CASE OF WELL-QUALIFIED STUDENTS THE LANGUAGE REQUIREMENT MAY BE MODIFIED.

3-COMPLETE AT LEAST TWENTY SEMESTER HOURS FROM THE COURSES LISTED BELOW, INCLUDING SOC. S. 101 AND/OR 102 AND SOC. S. 301, CHOSEN FROM AMONG FOUR DEPARTMENTS. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE LATIN AMERICAN STUDIES PROGRAM MAY NOT BE INCLUDED WITHIN THIS TWENTY HOURS.

ANTH. 271, 350, 352, 361, 380
ART 318
ECON. 328, 329
GEOG. 231, 332
HIST. 375, 376, 377
PHIL. 319
POL. S. 342
PORT. 301, 303, 304, 305, 306
SOC. S. 101, 102, 301
SOC. 373
SPAN. 222, 307, 308, 332

MINORS--STUDENTS WHO MAJOR IN LATIN AMERICAN STUDIES MAY ELECT MINORS AS FOLLOWS--TWENTY HOURS, EXCLUDING COURSES TAKEN IN FRESHMAN YEAR, IN ANY ONE OF THE FOLLOWING SUBJECTS--AGRICULTURAL ECONOMICS ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, HISTORY OF ART, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH, SOCIAL WORK, AND SOCIOLOGY. MAJORS IN LATIN AMERICAN STUDIES MAY NOT OFFER A SPLIT MINOR.

GRADUATE MINOR IN LATIN AMERICAN STUDIES

CANDIDATES FOR THE MASTERS DEGREE MUST ELECT A MINIMUM OF TWO UNITS FOR A MINOR IN THIS PROGRAM. DOCTORAL CANDIDATES WHO ELECT LATIN AMERICAN STUDIES AS A SOLE MINOR MUST EARN A MINIMUM OF FOUR UNITS OF CREDIT IN APPROVED COURSES, FOR A SPLIT MINOR, AT LEAST THREE UNITS OF CREDIT MUST BE EARNED. THE COURSES FOR ALL GRADUATE MINORS IN LATIN AMERICAN STUDIES MUST BE TAKEN IN AT LEAST TWO DEPARTMENTS. COURSES IN THE FOLLOWING LIST MAY BE INCLUDED IN THE GRADUATE MINOR.

AG. EC. 401
AGRON. 429
ANTH. 350, 352, 361, 380, 490
ART 318, 491
BOT. 300
ECON. 328, 329, 411, 490
GEOG. 332, 495
HIST. 375, 376, 377, 476
PHIL. 319, 483
POL. S. 342, 441, 442, 493
PORT. 301, 303, 304, 305, 306, 491
SOC. S. 301
SOC. 373, 490
SPAN. 307, 308, 431, 432, 433, 434, 435, 436, 437, 438

STUDENTS IN OTHER COLLEGES

STUDENTS IN TECHNICAL AND PROFESSIONAL COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF LATIN AMERICAN AFFAIRS, CULTURE, AND LANGUAGES ARE INVITED TO CONSULT WITH MEMBERS OF THE TEACHING STAFF OF THE LATIN AMERICAN STUDIES PROGRAM, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH A PROGRAM MAY OFTEN BE ADOPTED AS A SPECIAL MINOR UNDER EXISTING REGULATIONS IF THE STUDENT SO DESIRES. IT IS RECOGNIZED THAT THE NUMBER OF ELECTIVE HOURS AVAILABLE FOR SUCH SPECIAL AREA STUDIES VARIES AMONG MANY OF THE EIGHT AND TEN SEMESTER PROGRAMS IN THE UNIVERSITY, BUT MOST STUDENTS WISHING TO INCREASE THEIR PROFICIENCY IN LATIN AMERICAN AFFAIRS CAN DO SO WITHOUT EXCESSIVE CROWDING OF SCHEDULES. THESE COURSES ARE OF PARTICULAR VALUE TO STUDENTS WHO INTEND TO CARRY ON TECHNICAL OR PROFESSIONAL WORK IN THE LATIN AMERICAN AREA FOR THE GOVERNMENT, PRIVATE BUSINESS, PUBLICATIONS, OR RELIGIOUS ORGANIZATIONS.

LAW

DEPARTMENT OFFICE 209 LAW

COURSES FOR FIRST-YEAR LAW STUDENTS

LAW 302 CONTRACTS B.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
*3 HOURS, OR 1 UNIT
PATTERSON, GOBLE & JONES, CASES ON CONTRACTS, 4TH ED.

00688	LECT-DISC	A	8	FS	A LAW	HAY
		A	9	WTHFS	A LAW	HAY

LAW 304 TORTS B.
*GRADUATE CREDIT FOR THIS COURSE ONLY WITH PERMISSION OF DEPARTMENT FOR STUDENTS WHO ARE CANDIDATES FOR THE M.C.L. DEGREE.
*3 HOURS, OR 1 UNIT

00689	LECT-DISC	A	10	MTUWTH	A LAW	O CONNELL
		A	11	MTU	A LAW	O CONNELL

COURSES FOR ADVANCED LAW STUDENTS

LAW 329 DECEDENTS ESTATES AND TRUSTS.
3 HOURS, OR 1 UNIT

00690	LECT-DISC	A	1-3	MTUW		A LAW	PLAGER

LAW 330 RESTITUTION.
3 HOURS, OR 1 UNIT
WADE, CASES ON RESTITUTION.

00691	LECT-DISC	A	8		FS	B LAW	DAVIS
		A	9		WTHFS	B LAW	DAVIS

LAW 331 LEGISLATION.
3 HOURS, OR 1 UNIT
HORACK, CASES ON LEGISLATION--2D ED.
CASEBOOK TO BE ANNOUNCED.

00692	LECT-DISC	A	8	MTUWTH		A LAW	COHN
		A	9	MTU		A LAW	COHN

LAW 333 PERSONS.
2 HOURS, OR 1/2 UNIT
JACOBS & GOEBEL, CASES ON DOMESTIC RELATIONS, 4TH ED.

00693	LECT-DISC	A	3-5	TUW		A LAW	CARLSTON

LAW 339 CONFLICT OF LAWS.
4 HOURS, OR 1 UNIT
CHEATHAM, GOODRICH, GRISWOLD AND REESE, CASES ON CONFLICT OF LAWS, 4TH ED.

00694	LECT-DISC	A	10	MTUWTH		B LAW	HOLT
		A	11	MTU		B LAW	HOLT

LAW 344 CREDITORS RIGHTS.
3 HOURS, OR 1 UNIT
HANNA & MACLACHLAN, CASES ON CREDITORS RIGHTS, 5TH ED., AND HANNA & MACLACHLAN, BANKRUPTCY ACT OF 1898 AS AMENDED WITH ANNOTATIONS, 8TH ED.

00695	LECT-DISC	A	1-3	THF		A LAW	BOWMAN

LAW 361 PROBLEMS AND PROCEDURES IN OFFICE PRACTICE.
1 HOUR

00696	CONF	A	9	MTU	117	LAW	CARLSTON
00697	CONF	B	3	THF	117	LAW	BOWMAN

LAW 369 SOVIET LAW.
3 HOURS, OR 1 UNIT
MATERIALS TO BE ANNOUNCED.

00698	LECT-DISC	A	10		FS	A LAW	
		A	11		WTHFS	A LAW	

LAW 399 RESEARCH ON SPECIAL TOPICS.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT

00699	CONF	A	ARR				STAFF

COURSES FOR GRADUATES

LAW 499 THESIS RESEARCH.
1/2 TO 2 UNITS

00700	CONF	A	ARR				STAFF

LIBRARY SCIENCE

DEPARTMENT OFFICE 331 LIB

COURSES FOR ADVANCED UNDERGRADUATES

LIB S 201 INTRODUCTION TO REFERENCE.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

00701	LECT-DISC	A	8	MTUWTHF	66	LIB	BUNGE
		A	8-10	W	66	LIB	BUNGE
00702	LECT-DISC	B	10	MTU THF	66	LIB	BUNGE
		B	2	M	66	LIB	BUNGE

LIB S 204 DEVELOPMENT AND OPERATION OF LIBRARIES.
PREREQUISITE--JUNIOR STANDING.
3 HOURS OR 2 HOURS IN SUMMER.

00703	LECT-DISC	A	9	MTU THF	66	LIB	SMITH
00704	LECT-DISC	B	11	MTU THF	66	LIB	SMITH

LIB S 255 ORGANIZATION OF LIBRARY MATERIALS.
PREREQUISITE--SENIOR STANDING.
3 HOURS

00705	LECT-DISC	A	8	M WTHF	314	LIB	SCHROEDER
		A	8-10	TU	314	LIB	
00706	LECT-DISC	B	10	MTUW F	314	LIB	SCHROEDER
		B	2	F	314	LIB	
00707	LECT-DISC	C	3	MTUW F	314	LIB	FIELD
		C	3-5	Th	314	LIB	

LIB S 258 SELECTION OF LIBRARY MATERIALS.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 2 HOURS IN SUMMER

00708	LECT-DISC		1	MTU THF	66	LIB	CARROLL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LIB S 301 LITERATURE OF THE HUMANITIES AND SOCIAL SCIENCES.
PREREQUISITE--SENIOR STANDING.
3 HOURS, OR 1 UNIT

00709	LECT-DISC		8-10	TU F	227	LIB	ANDERSON

LIB S 303 LIBRARY MATERIALS FOR CHILDREN.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

00710	LECT-DISC		10-12	M W F	309	LIB	CRAWFORD

LIB S 304 LIBRARY MATERIALS FOR YOUNG ADULTS.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

00711	LECT-DISC		1-3	M W F	227	LIB	CRAWFORD

LIB S 309 STORYTELLING.
3 HOURS, OR 1/2 OR 1 UNIT

00712	LECT-DISC		8-10	TU TH	305	G H	LOHRER

COURSES FOR GRADUATES

LIB S 403 METHODS OF INVESTIGATION IN LIBRARIANSHIP.
1 UNIT

00713	LECT-DISC	8	M	TH	429	LIB	JENKINS

LIB S 405 LIBRARY ADMINISTRATION.
1 UNIT

00714	LECT-DISC	3-5	M	TH	66	LIB	GOLDSTEIN

LIB S 407 CATALOGING AND CLASSIFICATION, I.
1 UNIT

00715	LECT-DISC	1	MTU	THF	314	LIB	FIELD
		1-3		W	314	LIB	FIELD

LIB S 409 COMMUNICATION ROLES AND RESPONSIBILITIES OF LIBRARIES.
1 UNIT

00716	LECT-DISC	8-10	M	W	227	LIB	GOLDSTEIN

LIB S 411 REFERENCE SERVICE IN THE HUMANITIES AND SOCIAL SCIENCES.
1 UNIT

00717	LECT-DISC	11-1230	M	W	314	LIB	ANDERSON
		11		F	314	LIB	ANDERSON

LIB S 427 RESOURCES OF AMERICAN LIBRARIES.
1 UNIT

00718	LECT-DISC	10-12	M	TH	227	LIB	STEVENS

LIB S 429 INFORMATION STORAGE AND RETRIEVAL.
PREREQUISITE--LIB. S. 405 AND CONSENT OF INSTRUCTOR.
1 UNIT

00719	LECT-DISC	3-5	TU	F	66	LIB	CARROLL

LIB S 431 HISTORY OF LIBRARIES.
1/2 OR 1 UNIT

00720	LECT-DISC	10-12	TU	F	227	LIB	STEVENS

LIB S 433 ADVANCED SUBJECT BIBLIOGRAPHY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/2 UNIT
*SEC. A -- ARCHITECTURE *SEC. F -- JOURNALISM
*SEC. D -- EDUCATION *SEC. I -- MUSIC
*SEC. G -- LAW
*SEC. H -- MAPS

00721	LECT-DISC *D	ARR					STENSTROM
00722	LECT-DISC *F	1-3		TH	227	LIB	BLUM
00723	LECT-DISC *I	ARR					

LIB S 441 HISTORY OF CHILDRENS LITERATURE.
1 UNIT

00724	LECT-DISC	8-10	M	W	305	G H	LOHRER

COURSES FOR ADVANCED GRADUATES

LIB S 450 ADVANCED PROBLEMS IN LIBRARIANSHIP.
PREREQUISITE--A FIFTH-YEAR DEGREE IN LIBRARY SCIENCE, CONSENT OF ASSOCIATE DIRECTOR.
1/2 TO 2 UNITS

00725	CONF	ARR	STAFF

LIB S 499 THESIS RESEARCH.
MS CANDIDATES--0 TO 2 UNITS, PHD CANDIDATES--0 TO 4 UNITS

00726	CONF	ARR	STAFF

LINGUISTICS

DEPARTMENT OFFICE 276 DAVENPORT HALL

THE DEPARTMENT OF LINGUISTICS OFFERS A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY. THE FOLLOWING FIELDS OF LINGUISTICS ARE AVAILABLE FOR CONCENTRATION--DESCRIPTIVE LINGUISTICS, HISTORICAL LINGUISTICS, AND INTERDISCIPLINARY STUDY IN PSYCHOLINGUISTICS, ETHNOLINGUISTICS, EXPERIMENTAL PHONETICS, AND AUTOMATA STUDIES.

UNDERGRADUATE PREPARATION FOR THE STUDY OF LINGUISTICS SHOULD INCLUDE THE EQUIVALENT OF AT LEAST THREE YEARS OF FOREIGN LANGUAGE EXPERIENCE, FOR HISTORICAL LINGUISTICS A BROAD BACKGROUND IN THE HUMANITIES AND SOCIAL STUDIES AND FOR DESCRIPTIVE LINGUISTICS THE EQUIVALENT OF GOOD UNDERGRADUATE TRAINING IN MATHEMATICS AND THE SCIENCES IS DESIRABLE. STUDENTS APPLYING FOR ADMISSION MUST HAVE AT LEAST A 3.75 GRADE POINT AVERAGE FOR THAT PORTION OF THE WORK WHICH REPRESENTS THE LAST SIXTY HOURS EARNED TOWARD THE BACHELORS DEGREE, EXCLUSIVE OF REQUIRED PHYSICAL EDUCATION, MILITARY TRAINING, RECREATIONAL ACTIVITIES IN THE ARTS, OR SPECIALIZED VOCATIONAL OR RELIGIOUS SUBJECTS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LING 300 INTRODUCTION TO LINGUISTICS.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

00727	LECT-DISC	10	MTUWTHFS	148	ADMIN	KAZAZIS

LING 305 INTRODUCTION TO APPLIED LINGUISTICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT.

00728	LECT-DISC	3	MTUWTHFS	148	ADMIN	KACHRU

LING 376 SPEECH SCIENCE, II.
SAME AS SPCH. 376.
PREREQUISITE--LING. 375 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
*ONE HOUR TO BE ARRANGED.

00729	LECT-DISC B	9	MTUWTHF	104	SP CLINIC	ZEMLIN

LING 387 THE STRUCTURE OF ENGLISH.
SAME AS ENGL. 387.
3 HOURS, OR 3/4 UNIT
*ONE HOUR TO BE ARRANGED.

00730	LECT-DISC	11	MTUWTHFS	148	ADMIN	LEES

COURSES FOR GRADUATES

LING 490 SPECIAL TOPICS IN LINGUISTICS.
1/2 TO 2 UNITS

00731	CONF	ARR	STAFF

LING 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00732	CONF	ARR	STAFF

MANAGEMENT

DEPARTMENT OFFICE 350 COM W

COURSES FOR UNDERGRADUATES

```
MGMT  101     INDUSTRIAL ORGANIZATION AND MANAGEMENT.
         PREREQUISITE--ECON. 102 OR CONSENT OF INSTRUCTOR, FORTY-FIVE CREDIT
         *CREDIT IS NOT GIVEN IN BOTH MGMT. 101 AND I. E. 237.
         HOURS.
         *3 HOURS
        00733   LECT-DISC  E       1        MTUWTHF    36  COM W
                           E       2              F    36  COM W
```

COURSES FOR ADVANCED UNDERGRADUATES

```
MGMT  248     PERSONNEL ADMINISTRATION.
         PREREQUISITE--ECON. 102 OR 108.
         3 HOURS
        00734   LECT-DISC  C      10        MTUWTHF   160  COM W
                           C       3             W    160  COM W
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
MGMT  312     HUMAN RELATIONS IN BUSINESS.
              SAME AS L.I.R. 312.
         PREREQUISITE--MGMT. 101 OR EQUIVALENT.
         3 HOURS, OR 1/2 OR 3/4 UNIT
        00735   LECT-DISC  D      11        MTUWTHF   160  COM W
                           D       3             TH   160  COM W

MGMT  320     ORGANIZATION THEORY AND PRACTICE.
         PREREQUISITE--MGMT. 312.
         3 HOURS, OR 1/2 OR 3/4 UNIT
        00736   LECT-DISC  B       9        MTUWTHF   160  COM W
                           B       3             TU   160  COM W
```

COURSES FOR GRADUATES

```
MGMT  448     PROBLEMS OF PERSONNEL MANAGEMENT.
              SAME AS L.I.R. 448.
         PREREQUISITE--MGMT. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
         1 UNIT
        00737   LECT-DISC          1-3       M   TH    160  COM W          YOUNG

MGMT  499     THESIS RESEARCH.
         1 UNIT
        00738   CONF               1-3            W    160  COM W          DEMARIS
```

MARKETING

DEPARTMENT OFFICE 411 D K H

COURSES FOR UNDERGRADUATES

```
MKTG  101     PRINCIPLES OF MARKETING.
         PREREQUISITE--ECON. 102 OR 108, AND FORTY-FIVE CREDIT HOURS.
         *CREDIT IS NOT GIVEN IN BOTH MKTG. 101 AND 272.
         *3 HOURS
        00739   LECT-DISC  B       9        MTUWTHF    24  COM W
                           B       4           W       24  COM W
```

COURSES FOR ADVANCED UNDERGRADUATES

```
MKTG  287     ADVERTISING.
         PREREQUISITE--MKTG. 101.
         *CREDIT IS NOT GIVEN FOR BOTH MKTG. 287 AND ADV. 281.
         *3 HOURS
         *ONE ADDITIONAL HOUR TO BE ARRANGED.
        00740   LECT-DISC  D     *11        MTUWTHF   140  COM W          WALES
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
MKTG  305     CONTEMPORARY PROBLEMS IN MARKETING MANAGEMENT.
         PREREQUISITE--MKTG. 101, SENIOR STANDING.
         3 HOURS, OR 1/2 UNIT
        00741   LECT-DISC  A       8        MTUWTHF   140  COM W          DEBOER
                           A       4        M         140  COM W          DEBOER

MKTG  321     MARKETING RESEARCH.
         PREREQUISITE--MKTG. 101.
         FIELD TRIP, ESTIMATED EXPENSE $4.
         3 HOURS, OR 1/2 UNIT
         *ONE ADDITIONAL HOUR TO BE ARRANGED.
        00742   LECT-DISC  C     *10        MTUWTHF    24  COM W          WALES

MKTG  373     SALES MANAGEMENT.
         PREREQUISITE--MKTG. 101 OR 272.
         3 HOURS, OR 1/2 OR 1 UNIT
        00743   LECT-DISC  B       9        MTUWTHF   140  COM W          DEBOER
                           B       4         TU       140  COM W          DEBOER
```

COURSES FOR GRADUATES

```
MKTG  493     RESEARCH IN SPECIAL FIELDS.
         1/4 TO 2 UNITS
        00744   CONF            ARR                                       WALES

MKTG  499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
        00745   DISC            ARR                                       DEBOER
```

MATHEMATICS

DEPARTMENT OFFICE 273 A H

MAJOR IN MATHEMATICS

MAJOR--TWENTY-THREE HOURS IN MATHEMATICS, EXCLUDING COURSES WITH NUMBERS LESS THAN 130, AND INCLUDING THREE COURSES CHOSEN FROM MATH. 317, 318, 327, 328, 332, 333, 347, 348, 353, 354, 387.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ACCOUNTANCY, ASTRONOMY, CHEMISTRY, ECONOMICS, FINANCE, PHILOSOPHY, PHYSICS, PSYCHOLOGY, STATISTICS--MATH. 161, 361, 362, 363, 364, 375, SURVEYING, THEORETICAL AND APPLIED MECHANICS.
DEPARTMENTAL HONORS. ENTERING STUDENTS WITH SUPERIOR MATHEMATICAL ABILITY SHOULD APPLY TO THE DEPARTMENT OF MATHEMATICS, 273 ALTGELD HALL, FOR INFORMATION REGARDING THE HONORS COURSE, MATH. 149. INFORMATION REGARDING REQUIREMENTS FOR GRADUATION WITH DISTINCTION IN MATHEMATICS IS AVAILABLE FROM DR. J. W. PETERS, 267 ALTGELD HALL.

NOTE--AN ENTERING STUDENT WITH AN ADEQUATE PREPARATION IN HIGH SCHOOL MATHEMATICS SHOULD ENROLL IN ANALYTIC GEOMETRY, MATH. 122 OR 123, DURING THE FIRST SEMESTER, AND IN THE CALCULUS, MATH. 132 OR 133, DURING THE SECOND SEMESTER OF HIS FRESHMAN YEAR. ADMISSION TO ANALYTIC GEOMETRY NORMALLY REQUIRES A PASSING GRADE ON THE MATHEMATICS PLACEMENT TEST. A STUDENT INELIGIBLE FOR ANALYTIC GEOMETRY SHOULD ENROLL IN ALGEBRA, MATH. 111 OR 112, AND TRIGONOMETRY, MATH. 114, DURING HIS FIRST SEMESTER.

UNDERGRADUATE STUDENTS INTENDING TO TAKE ADVANCED WORK OR A MAJOR IN MATHEMATICS SHOULD COMPLETE THE SECOND SEMESTER OF THE CALCULUS, MATH. 142 OR 143, AS EARLY AS POSSIBLE. OF THE VARIOUS COURSES OFFERED AT THE 300 LEVEL, THE INTRODUCTORY COURSES IN ALGEBRA, 317, 318, IN GEOMETRY, 327, 328, IN TOPOLOGY, 332, 333, AND IN ANALYSIS, 347, 348 ARE BASIC FOR MORE ADVANCED WORK IN MATHEMATICS. MANY OF THE OTHER 300 LEVEL COURSES ARE DESIGNED TO SERVE STUDENTS WHO ANTICIPATE A RELATIVELY EARLY TERMINATION OF THEIR COURSE WORK IN MATHEMATICS, THESE STUDENTS MIGHT PREFER THE COURSES THAT RELATE INTERMEDIATE MATHEMATICS TO THEIR SPECIALIZED AREAS OF INTEREST. STUDENTS PREPARING TO TEACH HIGH SCHOOL OR COLLEGE MATHEMATICS, OR THOSE INTERESTED IN MATHEMATICS AS A CAREER SHOULD CONSULT WITH DR. J. W. PETERS, 267 ALTGELD HALL, CONCERNING THEIR PROGRAM AT THE EARLIEST POSSIBLE MOMENT AFTER ENTERING THE UNIVERSITY.

MAJOR IN STATISTICS

MAJOR--TWELVE HOURS BEYOND CALCULUS INCLUDING MATH. 315, 347, 363, AND THREE OTHER HOURS OF 300 COURSES IN STATISTICS IN THE DEPARTMENT OF MATHEMATICS.

MINORS--TWENTY HOURS IN ONE SUBJECT APPROVED BY THE DEPARTMENT OF MATHEMATICS. OF THESE TWENTY HOURS NOT MORE THAN NINE MAY BE IN STATISTICAL METHODS, AND MATH. 161 MAY BE TAKEN AS THREE OF THESE HOURS. THE COURSES NOT EMPHASIZING STATISTICAL METHODS SHOULD BE CHOSEN SO THAT COURSES ON THE 400 LEVEL CAN BE TAKEN IF THE STUDENT ENTERS GRADUATE COLLEGE.

MAJOR IN ACTUARIAL SCIENCE

MAJOR--ONE YEAR OF CALCULUS AND AT LEAST FIVE COURSES CHOSEN FROM THE FOLLOWING--MATH. 195, 311, 312, 362, 363, 371, 372,

MINORS--TWENTY HOURS CHOSEN FROM THE FOLLOWING--FIN. 258, 259, 260, 262, 270, 360, 363, 370.

NOTE--STUDENTS ARE URGED TO ELECT ACCY. 201 AND B. LAW 261 IN THEIR JUNIOR YEAR.

COURSES FOR UNDERGRADUATES

MATH 111 ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1 UNIT, PLANE GEOMETRY, 1 UNIT.
STUDENTS HAVING 1-1/2 OR MORE UNITS OF HIGH SCHOOL ALGEBRA MAY NOT TAKE THIS COURSE UNLESS THEY HAVE THE APPROVAL OF THEIR COLLEGE OFFICE
CREDIT IS NOT GIVEN FOR BOTH MATH. 111 AND 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

00746	LECT-DISC	A1	8-10	MTUWTHF	155	A	H
00747	LECT-DISC	C1	10-12	MTUWTHF	155	A	H

MATH 112 COLLEGE ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, PLANE GEOMETRY, 1 UNIT.
CREDIT IS NOT GIVEN FOR BOTH MATH. 111 AND 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

00748	LECT-DISC	B1	9	MTUWTHFS	165	A	H

MATH 114 PLANE TRIGONOMETRY.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, OR REGISTRATION IN MATH 111, PLANE GEOMETRY, 1 UNIT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

00749	LECT-DISC	A1	8	TUWTHF	102	A	H
00750	LECT-DISC	D1	11	TUWTHF	147	A	H

MATH 123 ANALYTIC GEOMETRY.
PREREQUISITE--MATH. 111 OR 112, AND 114.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

00751	LECT-DISC	A1	8-10	MTUWTHF	159	A	H
00752	LECT-DISC	B1	9-11	MTUWTHF	169	A	H
00753	LECT-DISC	C1	10-12	MTUWTHF	159	A	H

MATH 124 INTRODUCTORY ANALYSIS FOR SOCIAL SCIENTISTS.
PREREQUISITE--MATH. 111 OR 112.
*CREDIT IS NOT GRANTED FOR MATH. 124-134 IN ADDITION TO MATH. 358-359.
*3 HOURS

00754	LECT-DISC	C1	10	MTUWTHFS	147	A	H

MATH 133 CALCULUS, I.
PREREQUISITE--MATH. 122 OR 123.
3 HOURS

00755	LECT-DISC	B1	9	MTUWTHFS	147	A	H
00756	LECT-DISC	C1	10	MTUWTHFS	102	A	H

MATH 142 CALCULUS, II.
PREREQUISITE--MATH. 132.
3 HOURS

00757	LECT-DISC	B1	9	MTUWTHFS	145	A	H

MATH 143 CALCULUS, II.
PREREQUISITE--MATH. 133.
5 HOURS

00758	LECT-DISC	B1	9-11	MTUWTHF	110	A	H

```
MATH  195     INTRODUCTION TO AUTOMATIC DIGITAL COMPUTING.
         PREREQUISITE--SOPHOMORE STANDING AND ONE YEAR OF COLLEGE
         MATHEMATICS, INCLUDING DIFFERENTIAL CALCULUS.
         3 HOURS
        00759   LECT-DISC  F1      2-4       M  W  F   314  A H            HAMILTON
```

COURSES FOR ADVANCED UNDERGRADUATES

```
MATH  202     MATHEMATICS FOR ELEMENTARY TEACHERS, I.
         PREREQUISITE--JUNIOR STANDING IN ELEMENTARY EDUCATION.
         *NO CREDIT FOR L. A. AND S. STUDENTS.
         *5 HOURS
        00760   LECT-DISC  C1      10-12     MTUWTHF   314  A H

MATH  291     THESIS AND READING COURSE.
         PREREQUISITE--MATH. 347 WITH GRADE OF B OR BETTER, OR CONSENT OF
         MATHEMATICS HONORS COMMITTEE.
         2 HOURS
        00761   DISC             ARR

MATH  298     SUMMER PROGRAM IN INDEPENDENT STUDY.
         PREREQUISITE--SELECTION BY HONORS COMMITTEE UPON FORMAL APPLICATION
         FROM STUDENT.
         6 HOURS
        00762   DISC             ARR
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
MATH  300     THE THEORY OF SETS AND THE REAL NUMBER SYSTEM.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
         *SECTION Y1 IS A 10-WEEK COURSE FOR TEACHERS ONLY.
        00763   LECT-DISC  C1      10        MTUWTHF   145  A H
                           C1       3            TH    145  A H
        00764   LECT-DISC  D1      11        MTUWTHF   145  A H
                           D1       3        M         145  A H
        00765   LECT-DISC *Y1    ARR                   156  ADMIN

MATH  302     FUNDAMENTAL CONCEPTS OF GEOMETRY.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
        00766   LECT-DISC  A1       8        MTUWTHF   110  A H            PETERS
                           A1       3         TU       110  A H

MATH  306     SELECTED MATHEMATICAL TOPICS FOR SECONDARY SCHOOL TEACHERS, I.
         PREREQUISITE--ONE YEAR OF SECONDARY SCHOOL TEACHING IN MATHEMATICS
         OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1/2 OR 1 UNIT
         *SECTION Y1 IS A 10-WEEK COURSE FOR TEACHERS ONLY.
        00767   LECT-DISC *Y1    ARR                   156  ADMIN

MATH  312     ADVANCED ALGEBRA.
         PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1 UNIT
        00768   LECT-DISC  B1       9        MTUWTHF   173  A H            MILES
                           B1       3           W      173  A H

MATH  315     LINEAR TRANSFORMATIONS AND MATRICES.
         PREREQUISITE--ONE YEAR OF CALCULUS.
         3 HOURS, OR 1 UNIT
        00769   LECT-DISC  B1       9        MTUWTHFS  143  ADMIN
        00770   LECT-DISC  C1      10        MTUWTHFS  143  ADMIN
        00771   LECT-DISC  D1      11        MTUWTHFS  152  ADMIN
```

MATH 317 INTRODUCTION TO HIGHER ALGEBRA, I.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

00772	LECT-DISC	B1	9	MTUWTHF	108	A H
		B1	3	W	108	A H
00773	LECT-DISC	C1	10	MTUWTHF	142	ADMIN
		C1	3	TH	142	ADMIN
00774	LECT-DISC	D1	11	MTUWTHF	110	A H
		D1	3	M	110	A H
00775	LECT-DISC	*S1	9	MTUWTH	138	ADMIN

MATH 318 INTRODUCTION TO HIGHER ALGEBRA, II.
PREREQUISITE--MATH. 317.
3 HOURS, OR 1 UNIT

00776	LECT-DISC	B1	9	MTUWTHF	102	A H
		B1	3	W	102	A H
00777	LECT-DISC	D1	11	MTUWTHF	108	A H
		D1	3	M	108	A H

MATH 332 INTRODUCTION TO SET THEORY AND TOPOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 347.
3 HOURS, OR 1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

00778	LECT-DISC	D1	11	MTUWTHF	102	A H
		D1	3	M	102	A H
00779	LECT-DISC	*S1	3	MTUWTH	156	ADMIN

MATH 343 ADVANCED CALCULUS.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

00780	LECT-DISC	A1	8	MTUWTHFS	142	ADMIN
00781	LECT-DISC	B1	9	MTUWTHFS	149	ADMIN
00782	LECT-DISC	C1	10	MTUWTHFS	149	ADMIN
00783	LECT-DISC	D1	11	MTUWTHFS	142	ADMIN

MATH 345 DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS.
PREREQUISITE--ONE YEAR OF CALCULUS.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 345 AND MATH. 349.
*3 HOURS, OR 1 UNIT

00784	LECT-DISC	A1	8	MTUWTHFS	149	ADMIN
00785	LECT-DISC	C1	10	MTUWTHFS	152	ADMIN
00786	LECT-DISC	D1	11	MTUWTHFS	143	ADMIN

MATH 346 COMPLEX VARIABLES AND APPLICATIONS.
PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND MATH. 348.
*3 HOURS, OR 1 UNIT

00787	LECT-DISC	A1	8	MTUWTHFS	152	ADMIN
00788	LECT-DISC	B1	9	MTUWTHFS	152	ADMIN
00789	LECT-DISC	D1	11	MTUWTHFS	149	ADMIN

MATH 347 INTRODUCTION TO HIGHER ANALYSIS, REAL VARIABLES.
PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

00790	LECT-DISC	B1	9	MTUWTHF	167	E E B
		B1	3	W	167	E E B
00791	LECT-DISC	C1	10	MTUWTHF	167	E E B
		C1	3	TH	167	E E B
00792	LECT-DISC	*S1	11	MTUWTH	238	ADMIN

MATH 348 INTRODUCTION TO HIGHER ANALYSIS--COMPLEX VARIABLES.
PREREQUISITE--MATH. 347.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND 348.
*3 HOURS, OR 1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

00793	LECT-DISC	C1	10	MTUWTHF	154	ADMIN
		C1	3	TH	154	ADMIN
00794	LECT-DISC	*S1	11	MTUWTH	59	E E B

MATH 350 TOPICS IN PURE MATHEMATICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

00795	LECT-DISC	*S1	9	MTUWTH	59	E E B

MATH 363 ADVANCED STATISTICS, I.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

00796	LECT-DISC	C1	10	MTUWTHF	59	E E B		SINGH
		C1	3	TH	59	E E B		
00797	LECT-DISC	D1	11	MTUWTHF	167	E E B		GHOSH
		D1	3	M	167	E E B		

MATH 387 INTRODUCTION TO NUMERICAL ANALYSIS.
PREREQUISITE--SENIOR STANDING, CALCULUS, AND A COURSE IN DIFFERENTIAL EQUATIONS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

00798	LECT-DISC	B1	9	MTUWTHF	142	ADMIN		ABERTH
		B1	3	W	142	ADMIN		

MATH 388 MATHEMATICAL METHODS IN ENGINEERING AND SCIENCE.
PREREQUISITE--MATH. 343.
3 HOURS, OR 1 UNIT

00799	LECT-DISC	A1	8	MTUWTHF	154	ADMIN		BELFORD
		A1	3	TU	154	ADMIN		

COURSES FOR GRADUATES

MATH 401 SECOND COURSE IN ABSTRACT ALGEBRA, I.
PREREQUISITE--MATH. 317 AND 318.
1 UNIT
*SECTION S1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.

00800	LECT-DISC	E1	1	MTUWTHF	154	ADMIN		SACHS
00801	LECT-DISC	*S1	2	MTUWTH	142	ADMIN		LEAHEY

MATH 402 SECOND COURSE IN ABSTRACT ALGEBRA, II.
PREREQUISITE--MATH. 401.
1 UNIT

00802	LECT-DISC	F1	2	MTUWTHF	154	ADMIN		

MATH 441 REAL ANALYSIS, I.
PREREQUISITE--MATH. 347 OR EQUIVALENT.
1 UNIT

00803	LECT-DISC	D1	11	MTUWTHF	154	ADMIN		ALEXANDER

MATH 442 REAL ANALYSIS, II.
PREREQUISITE--MATH. 441.
1 UNIT

00804	LECT-DISC	C1	10	MTUWTHF	156	ADMIN		ORLAND

MATH 444 PARTIAL DIFFERENTIAL EQUATIONS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

00805	LECT-DISC	B1	9	MTUWTHF	154	ADMIN		SCOTT

MATH 490 READING COURSE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS

00806	DISC	ARR	

MATH 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00807	DISC	ARR	

DEPARTMENT OFFICE 144 M E B

COURSES FOR ADVANCED UNDERGRADUATES

M E 224 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 221, OR M E 222, T A M 221, CREDIT OR REGISTRATION IN T A M 223.
3 HOURS

00808	LECT-DISC	P	10-12	MTUWTHFS	336	M E B	BAYNE

M E 234 HEAT TREATMENT OF METALS.
PREREQUISITE--T A M 221, CREDIT OR REGISTRATION IN M E 224 AND T A M 223.
3 HOURS

00809	LECT-DISC	P	1	MTUWTH	110	M E B	RAMALINGAM,
00809	LAB	P	2-5	TU TH	110	M E B	SINGER
		P	2-5	TU TH	114	M E B	

M E 260 AIR FLOW AND CONDITIONING.
PREREQUISITE--M E 206 AND 212.
3 HOURS

00810	LECT-DISC	P	2-5	M W	320	M E L	STOECKER
		P	2-4	F	320	M E L	

M E 263 APPLICATION OF ENERGY CONCEPTS TO POWER PROCESSES.
PREREQUISITE--M.E. 206 AND 212.
5 HOURS

00811	LECT-DISC	P	7	MTUWTH	320	M E L	STAFF
		P	8-10	F	320	M E L	
00811	LAB	P	8-10	MTUWTH	101	M E B	
		P	8-10	MTUWTH	M E LAB		

M E 264 HEAT POWER LABORATORY.
PREREQUISITE--M E 212 AND 263.
3 HOURS

00812	LAB	P	8-10	MTUWTHFS	204	M E L	STAFF
		P	8-10	MTUWTHFS	101	M E B	
		P	8-10	MTUWTHFS	M E LAB		

M E 271 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 224.
3 HOURS

00813	LECT-DISC	P	10-12	MTUWTHFS	343	M E B	SEYFARTH

MEDIEVAL CIVILIZATION STUDIES PROGRAM

MAJOR--STUDENTS WHO ELECT MEDIEVAL CIVILIZATION AS A MAJOR MUST COMPLETE THE LOWER DIVISION REQUIREMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES AND FORTY SEMESTER HOURS--WHICH SATISFIES BOTH THE MAJOR AND MINOR REQUIREMENTS--IN COURSES CHOSEN FROM THE FOLLOWING LIST--ARCH. 214, ART 312, CLASS 301, 302, ENGL. 311, 320, HIST. 201, 301, 302, 303, 304, 305, 333, 345, ITAL. 311, 312, LAT. 104, PHIL. 304, SPCH. 361. OTHER COURSES MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ADVISER--ADVANCED READING COURSES IN ANY FOREIGN LANGUAGE OFFERED BY THE UNIVERSITY ARE STRONGLY RECOMMENDED.
ADVISER--PROFESSOR DENO GEANAKOPLOS, 353 ARMORY.

METALLURGICAL ENGINEERING

DEPARTMENT OFFICE 201 M M B

MET E 485 METALLURGICAL ENGINEERING PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

00814	CONF	ARR			STAFF

MET E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00815	CONF	ARR			STAFF

MICROBIOLOGY

DEPARTMENT OFFICE 127 BUR HALL

MAJOR--TWENTY HOURS OF MICROBIOLOGY, INCLUDING EITHER MCBIO. 100 AND 101, OR MCBIO. 200 AND 201. BOT. 210--ZOOL. 210--AND CHEM. 340, 350, AND 355 MAY BE SUBSTITUTED FOR MICROBIOLOGY COURSES TO THE EXTENT OF FIVE HOURS AS PART OF THE MAJOR. QUANTITATIVE AND ORGANIC CHEMISTRY, COLLEGE ALGEBRA, AND TRIGONOMETRY ARE REQUIRED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, BIOLOGY, BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, PHYSICS, PHYSIOLOGY, AND ZOOLOGY. NO COURSE MAY APPLY TO BOTH THE MAJOR AND THE MINOR.

COURSES FOR UNDERGRADUATES

MCBIO 100 INTRODUCTORY MICROBIOLOGY.
3 HOURS

00816	LECT	8	MTUWTHF	124	BUR HALL	HELM

MCBIO 101 INTRODUCTORY EXPERIMENTAL MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 100.
2 HOURS

00817	LAB	9-12	M W	242	BUR HALL	HELM AND
		9-11	F	242	BUR HALL	ASSISTANTS

COURSES FOR ADVANCED UNDERGRADUATES

207 RESEARCH AND SPECIAL PROBLEMS.
SAME AS BOT., ENTOM., PHYSL., AND ZOOL. 307.
PREREQUISITE--FIFTEEN HOURS OF MICROBIOLOGY, CONSENT OF INSTRUCTOR. OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMMULATE TEN HOURS.
*3 TO 5 HOURS

00818	LAB-DISC	ARR		BUR HALL	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MCBIO 326 PATHOGENIC BACTERIOLOGY.
PREREQUISITE--MCBIO. 101 OR 201 OR 309, ORGANIC CHEMISTRY.
5 HOURS, OR 1 UNIT

00819	LECT	8	MTUWTHF	136	BUR HALL	MCCAMISH
00819	LAB	9-12	M W F	202	BUR HALL	MCCAMISH & ASSISTANTS

COURSES FOR GRADUATES

MCBIO 490 INDIVIDUAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR
1/2 TO 2 UNITS

00820	LAB		ARR	BUR HALL	STAFF

MCBIO 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00821	LAB		ARR	BUR HALL	STAFF

MILITARY SCIENCE

DEPARTMENT OFFICE 110 ARMORY

BASIC MILITARY CURRICULUM

ENTERING MALE STUDENTS WHO ARE PHYSICALLY QUALIFIED AND WHO HAVE BEEN SELECTED FOR ENROLLMENT MUST, IN ADDITION TO REQUIRED MILITARY SCIENCE COURSES, REGISTER IN EITHER A NATURAL SCIENCE OR SOCIAL SCIENCE GENERAL EDUCATION SEQUENCE ACCEPTABLE TO THE MILITARY SCIENCE DEPARTMENT AND THE STUDENTS COLLEGE.

COMMON COURSES

MIL S 100 LEADERSHIP LABORATORY.
PREREQUISITE--APPROVAL OF THE PROFESSOR OF MILIARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

00822	LAB	A	12	MTU		ARMORY FLOOR	STAFF
00823	LAB	B	3-4		F	ARMORY FLOOR	

COURSES FOR UNDERGRADUATES

MIL S 101 INTRODUCTION TO MILITARY SCIENCE.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

00824	LECT-DISC	A	4	TU TH	182	ARMORY	STAFF
00825	LECT-DISC	B	10	W F	182	ARMORY	

MIL S 102 MILITARY MAP AND AERIAL PHOTOGRAPH ANALYSIS.
CREDIT OR REGISTRATION IN MIL S 101, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

00826	LECT-DISC	A	9	TU TH	182	ARMORY	STAFF
00827	LECT-DISC	B	1	W F	182	ARMORY	

SECOND YEAR STUDENTS SELECTED FOR CONTINUATION MUST, IN ADDITION TO THE REQUIRED MILITARY SCIENCE COURSES, REGISTER IN EITHER A NATURAL SCIENCE OR SOCIAL SCIENCE GENERAL EDUCATION SEQUENCE ACCEPTABLE TO THE MILITARY SCIENCE DEPARTMENT AND THE STUDENTS COLLEGE.

MIL S 111 PRINCIPLES OF MILITARY LEADERSHIP.
PREREQUISITE--MIL S 103, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

00828	LECT-DISC	A	1	TU TH	183	ARMORY	STAFF
00829	LECT-DISC	B	9	W F	183	ARMORY	

MIL S 112 AMERICAN MILITARY HISTORY.
PREREQUISITE--MIL S 103, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
2 HOURS

00830	LECT-DISC	A	8	MTUWTH	182	ARMORY	STAFF
00831	LECT-DISC	B	3	MTUWTH	182	ARMORY	

ADVANCED MILITARY CURRICULUM

SELECTED MALE STUDENTS WHO HAVE COMPLETED THE BASIC MILITARY COURSE OR ITS EQUIVALENT, AND WHO HAVE SATISFACTORILY PASSED PHYSICAL AND SCREENING EXAMINATIONS MAY APPLY FOR ENROLLMENT IN THE ADVANCED MILITARY CURRICULUM. EACH ADVANCED MILITARY CURRCIULUM STUDENT IS PAID A SUBSISTENCE ALLOWANCE. HE MUST ATTEND ROTC SUMMER TRAINING CAMP BETWEEN HIS FIRST AND SECOND YEAR IN THE ADVANCED PROGRAM. SUCCESSFUL COMPLETION OF THE CURRICULUM BY SELECTED STUDENTS NORMALLY RESULTS IN A COMMISSION AS A SECOND LIEUTENANT, U. S. ARMY RESERVE. SELECTED STUDENTS MEETING THE REQUIREMENTS MAY BE COMMISSIONED IN THE REGULAR ARMY.

STUDENTS ENROLLED IN THE REQUIRED MILITARY SCIENCE COURSES MUST, IN ADDITION, ENROLL IN THE THIRD AND IN THE FOURTH YEAR IN AN APPROVED COURSE OF ANOTHER DEPARTMENT. SELECTION OF THESE COURSES MUST BE APPROVED BY THE MILITARY SCIENCE DEPARTMENT ADVISOR AND BE ACCEPTABLE TO THE STUDENTS MAJOR DEPARTMENT.

COURSES FOR ADVANCED UNDERGRADUATES

MIL S 201 PRINCIPLES OF MILITARY INSTRUCTION.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, MIL S 111 AND 112 OR EQUIVALENT, CONCURRENT ENROLLMENT IN MIL S 100.
1 HOUR

00832	LECT-DISC	A	10	M W	183	ARMORY	STAFF
00833	LECT-DISC	B	2	M W	183	ARMORY	

MIL S 210 MILITARY LAW.
PREREQUISITE--MIL S 202 AND CONCURRENT ENROLLMENT IN MIL S 100.
1 HOUR

00834	LECT-DISC	A	10	TU TH	183	ARMORY	STAFF
00835	LECT-DISC	B	2	TU TH	183	ARMORY	

MIL S 211 PROSEMINAR.
PREREQUISITE--CREDIT OR REGISTRATION IN MIL. SCI. 210, CONCURRENT ENROLLMENT IN MIL. SCI. 100.
1 HOUR

00836	LECT-DISC	A	4	M W	183	ARMORY	STAFF
00837	LECT-DISC	B	12	W F	183	ARMORY	

MINING ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR GRADUATES

MIN E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00838	CONF	ARR	STAFF

DEPARTMENT OFFICE 100 S M H

COURSES FOR UNDERGRADUATES

MUSIC 101 THEORY OF MUSIC, I.
PREREQUISITE--MUSIC 100 OR EQUIVALENT.
3 HOURS

00839	LECT-DISC	A	8-10	MTUWTHF	8	S	A	KELLY

MUSIC 102 THEORY OF MUSIC, II.
PREREQUISITE--MUSIC 101.
3 HOURS

00840	LECT-DISC	A	9	MTUWTHF	106	S	M H	CARTER

MUSIC 106 COMPOSITION.
PREREQUISITE--QUALIFYING EXAMINATION IN COMPOSITION, TO BE ADMINISTERED BY THE THEORY-COMPOSITION FACULTY.
2 HOURS, SUMMER--2, 3, OR 4 HOURS

00841	CONF	A	ARR		206	T	A	GABURO
00842	CONF	B	ARR		206	T	A	MARTIRANO

MUSIC 107 EAR TRAINING, SIGHT SINGING, AND KEYBOARD HARMONY, I.
PREREQUISITE--MUSIC 101.
1 HOUR

00843	LAB-DISC	A	10	TUWTHF	106	S	M H	GABURO

MUSIC 130 INTRODUCTION TO THE ART OF MUSIC, I.
FOR NON-MUSIC STUDENTS ONLY.
3 HOURS

00844	LECT-DISC	A	9	TUWTHF	25	S	M H	NETTL

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 241 MUSIC FOR ELEMENTARY TEACHERS, II.
PREREQUISITE--MUSIC 240. REQUIRED FOR STATE ELEMENTARY SCHOOL CERTIFICATE BUT NO CREDIT GRANTED IN SCHOOL OF MUSIC.
3 HOURS

00845	LECT-DISC	A	1	MTUW F	116	1203	W NEV	OMER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 300 EIGHTEENTH CENTURY COUNTERPOINT.
PREREQUISITE--MUSIC 104 AND/OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

00846	LECT-DISC	A	1	MTUWTHF	8	S	A	JOHNSTON

MUSIC 306 COMPOSITION.
PREREQUISITE--MUSIC 104 OR 106 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT

00847	CONF	A	ARR		206	T	A	GABURO
00848	CONF	B	ARR		206	T	A	MARTIRANO

MUSIC 312 MUSIC OF THE BAROQUE AND CLASSICAL PERIODS.
PREREQUISITE--MUSIC 131 OR 214 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

00849	LECT-DISC	A	9	TUWTHF	103	S	M H	HUGHES

MUSIC 315 CONTEMPORARY MUSIC.
PREREQUISITE--JUNIOR STANDING AND/OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

00850	LECT-DISC	A	10	TUWTHF	103	S	M H	MACDONALD

MUSIC 316 MUSICAL CULTURES OF THE WORLD, I.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

00851	LECT-DISC	A	11	TUWTHF	201	H	A	NETTL

MUSIC 330 APPLIED MUSIC PEDAGOGY.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 HOURS, OR 1 UNIT
*2 HOURS, OR 1/2 UNIT
*SECTION-A-IS FOR PIANO MAJORS. SECTION-B-IS FOR STRING MAJORS.
SECTION-C-IS FOR VOICE MAJORS.

00852	LAB-DISC	A	9	TUWTHF	3	P	A	LYKE
00853	LAB-DISC	B	ARR		202	S	A	ROLLAND
00854	LAB-DISC	C	ARR		210	S	H	MILLER, G WILSON

MUSIC 340 INSTRUMENTAL CLINIC AND BAND PAGEANTRY.
PREREQUISITE--ADVANCED UNDERGRADUATE OR GRADUATE WITH MAJOR WORK OR EXPERIENCE IN BAND OR ORCHESTRA.
2 HOURS, OR 1/2 UNIT

00855	LECT-DISC	A	2	TUWTHF	106	S	M H	WEBB

MUSIC 342 PERCUSSION METHODS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION, AND MUSIC 174 AND 257 OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT

00856	LECT-DISC	A	2	TUWTHF	6	S	M H	SOEBBING

MUSIC 344 METHODS OF STRING CLASS TEACHING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

00857	LAB-DISC	A	9	TUWTHF	5	S	M H	WALLER

MUSIC 347 TEACHING OF WOODWIND INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

00858	LECT-DISC	A	1	TUWTHF	5	S	M H	BERRY, EDLEFSEN MCDOWELL, NANZETTA

COURSES FOR GRADUATES

MUSIC 402 ANALYSIS IN RELATION TO PERFORMANCE AND INTERPRETATION, I.
PREREQUISITE--MUSIC 104 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

00859	LECT-DISC	A	9-11	TUWTHF	104	1203	W NEV	LEONHARD, LYKE

MUSIC 406 COMPOSITION.
1/2 TO 1 1/2 UNITS

00860	CONF	A	ARR		206	T	A	GABURO
00861	CONF	B	ARR		206	T	A	MARTIRANO

MUSIC 419 THE HISTORY OF OPERA FROM MOZART TO THE PRESENT.
PREREQUISITE--MUSIC 312 AND 313 OR CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

00862	LECT-DISC	A	1-3	TU TH	101	H	A	HAMM

MUSIC 433 ADVANCED CHORAL LITERATURE AND CONDUCTING.
PREREQUISITE--GRADUATE STANDING IN MUSIC, MUSIC 432 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED.

00863	LECT-DISC	A	11-1	TUWTHF	25	S	M H	DECKER

MUSIC 435 VOCAL LITERATURE.
PREREQUISITE--BACHELOR OF MUSIC OR BACHELOR OF SCIENCE IN MUSIC EDUCATION, OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

00864	LECT-DISC	A	1-3	W F	215	S M H		KELLOGG

MUSIC 438 WIND INSTRUMENT LITERATURE.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT
*SECTION A--WOODWIND AND SECTION B--BRASS.

00865	LECT-DISC	A	2-4	TUWTHF	2	S M H		EDLEFSEN

MUSIC 441 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION, II.
1/2 OR 1 UNIT

00866	LECT-DISC	A	8	TUWTHF	104	1203	W NEV	LEONHARD

MUSIC 444 THE GENERAL MUSIC PROGRAM IN ELEMENTARY SCHOOLS.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION.
1/2 UNIT

00867	LECT-DISC	A	11	TUWTHF	104	1203	W NEV	BERGETHON

APPLIED MUSIC

NOTE--STUDENTS IN MUSIC CURRICULA RECEIVE THREE OR FOUR HOURS FOR THEIR MAJOR OR PRINCIPAL SUBJECT.

AS A PART OF THE REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE, SENIOR STUDENTS MUST PRESENT A PUBLIC RECITAL WHICH MEETS WITH SCHOOL OF MUSIC FACULTY APPROVAL AND CONFORMS WITH DEPARTMENTAL REQUIREMENTS.

MUSIC STUDENTS RECEIVE TWO HOURS CREDIT FOR THEIR MINOR OR SECONDARY SUBJECT.

STUDENTS FROM OTHER COLLEGES RECEIVE TWO HOURS CREDIT FOR WORK IN APPLIED MUSIC IF IN ACCORDANCE WITH THE REGULATIONS OF THEIR COLLEGE PASSING OF A PERFORMING EXAMINATION IS REQUIRED AS A PREREQUISITE TO THE INITIAL REGISTRATION IN ANY APPLIED MUSIC COURSE.

COURSES FOR UNDERGRADUATES

APPLIED MUSIC COURSES FOR UNDERGRADUATES

MUSIC 180 PIANO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00868	CONF	A	ARR		201	S M H		SANDERS
00869	CONF	B	ARR		112	S M H		AITKEN
00870	CONF	C	ARR		205	S M H		GOLD
00871	CONF	D	ARR		209	S M H		RUPPEL

MUSIC 181 VOICE.
2 OR 3 HOURS, SUMMER--1 OR 2 HOURS

00872	CONF	A	ARR		211	S M H		FOOTE
00873	CONF	B	ARR		210	S M H		G WILSON
00874	CONF	C	ARR		203	S M H		BAILEY
00875	CONF	D	ARR		215	S M H		KELLOGG
00876	CONF	E	ARR		200A	S M H		MILLER
00877	CONF	F	ARR		304	S H		HISS

MUSIC 182 ORGAN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS.

00878	CONF	A	ARR		200	S M H		PETTINGA

MUSIC 183 VIOLIN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00879	CONF	A	ARR	202	S	A	ROLLAND
00880	CONF	B	ARR	205	S	A	FARMER
00881	CONF	C	ARR				

MUSIC 184 VIOLA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00882	CONF	A	ARR				

MUSIC 185 CELLO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00883	CONF	A	ARR	105	S	A	FARRELL

MUSIC 186 STRING BASS.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00884	CONF	A	ARR	9	S	M	H KROLICK

MUSIC 187 FLUTE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00885	CONF	A	ARR	10	S	M	H NANZETTA

MUSIC 188 CLARINET.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00886	CONF	A	ARR	11	S	M	H MCDOWELL

MUSIC 189 OBOE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00887	CONF	A	ARR	2	S	M	H EDLEFSEN

MUSIC 190 BASSOON.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00888	CONF	A	ARR	203	S	M	H BERRY

MUSIC 191 CORNET AND TRUMPET.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00889	CONF	A	ARR	14	S	M	H SEXTON

MUSIC 192 FRENCH HORN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00890	CONF	A	ARR	4	S	M	H HOLDEN

MUSIC 193 TROMBONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00891	CONF	A	ARR	8	S	M	H GRAY

MUSIC 194 BARITONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00892	CONF	A	ARR	8	S	M	H GRAY

MUSIC 195 TUBA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00893	CONF	A	ARR	8	S	M	H GRAY

MUSIC 196 PERCUSSION.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00894	CONF	A	ARR	6	S	M	H SOEBBING

MUSIC 198 ALTO SAXOPHONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

00895	CONF	A	ARR	12	S	M	H COGGINS

APPLIED MUSIC COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PREREQUISITE--FOR STUDENTS IN THE BACHELOR OF MUSIC CURRICULUM, JUNIOR STANDING IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN MUSIC EDUCATION, COMPLETION OF THE CURRICULAR REQUIREMENT IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN OTHER COLLEGES OF THE UNIVERSITY, COMPLETION OF FOUR SEMESTERS IN THE COMPARABLE APPLIED MUSIC COURSE AT THE 100 LEVEL. QUALIFYING EXAM FOR TRANSFER STUDENTS.

MUSIC 380 PIANO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00896	CONF	A	ARR	201	S M H	SANDERS
00897	CONF	B	ARR	112	S M H	AITKEN

MUSIC 381 VOICE.
2 OR 3 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00898	CONF	A	ARR	211	S M H	FOOTE
00899	CONF	B	ARR	210	S H	G WILSON
00900	CONF	C	ARR	203	S M H	BAILEY
00901	CONF	D	ARR	215	S M H	KELLOGG
00902	CONF	E	ARR	200	S M H	MILLER

MUSIC 382 ORGAN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00903	CONF	A	ARR	200	S M H	PETTINGA

MUSIC 383 VIOLIN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00904	CONF	A	ARR	202	S A	ROLLAND
00905	CONF	B	ARR	205	S A	FARMER
00906	CONF	C	ARR			

MUSIC 384 VIOLA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00907	CONF	A	ARR			

MUSIC 385 CELLO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00908	CONF	A	ARR	105	S A	FARRELL

MUSIC 386 STRING BASS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00909	CONF	A	ARR	9	S M H	KROLICK

MUSIC 387 FLUTE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00910	CONF	A	ARR	10	S M H	NANZETTA

MUSIC 388 CLARINET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00911	CONF	A	ARR	11	S M H	MCDOWELL

MUSIC 389 OBOE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00912	CONF	A	ARR	2	S M H	EDLEFSEN

MUSIC 390 BASSOON.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00913	CONF	A	ARR	203	S M H	BERRY

MUSIC 391 CORNET AND TRUMPET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00914	CONF	A	ARR	14	S M H	SEXTON

MUSIC 392 FRENCH HORN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

00915	CONF	A	ARR	4	S M H	HOLDEN

MUSIC 393 TROMBONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
00916 CONF A ARR 8 S M H GRAY

MUSIC 394 BARITONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
00917 CONF A ARR 8 S M H GRAY

MUSIC 395 TUBA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
00918 CONF A ARR 8 S M H GRAY

MUSIC 396 PERCUSSION.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
00919 CONF A ARR 6 S M H SOEBBING

MUSIC 398 SAXOPHONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.
00920 CONF A ARR 12 S M H COGGINS

APPLIED MUSIC COURSES FOR GRADUATES

MUSIC 480 PIANO.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
00921 CONF A ARR 201 S M H SANDERS AND PIANO FACULTY

MUSIC 481 VOICE.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
00922 CONF A ARR 211 S M H FOOTE AND VOIC FACULTY

MUSIC 482 ORGAN.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT
00923 CONF A ARR 200 S M H PETTINGA

MUSIC 483 STRING INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT
00924 CONF A ARR 202 S A ROLLAND AND STRING FACULTY

MUSIC 484 WIND INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT
00925 CONF S ARR 11 S M H MCDOWELL AND WIND FACULTY

MUSIC 489 DOCTORAL PROJECTS.
OPEN ONLY TO STUDENTS IN THE DOCTOR OF MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 3 UNITS
00926 CONF A ARR 215 S M H KELLOGG AND GRADUATE FACULTY

MUSIC 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF ADVISOR.
0 TO 4 UNITS, SUMMER--0 TO 2 UNITS
00927 CONF A ARR 102 H A RINGER AND GRADUATE FACULTY

SUPPLEMENTARY INSTRUMENTS

NOTE--THESE COURSES ARE OPEN AS ELECTIVES TO STUDENTS FROM OTHER COLLEGES. IN COURSES INVOLVING TWO INSTRUMENTS, TWO DAYS A WEEK ARE SPENT ON EACH INSTRUMENT FOR THE ENTIRE SEMESTER. PREREQUISITE FOR ALL NON-MUSIC STUDENTS--CONSENT OF INSTRUCTOR.

COURSES FOR UNDERGRADUATES

MUSIC 170 STRING INSTRUMENTS.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
2 HOURS
*SECTION A IS FOR BEGINNERS. SECTION B IS FOR ADVANCED STUDENTS.

00928	LAB-DISC	A	8	MTUWTHF	5	S M H		WALLER

MUSIC 177 CLASS PIANO INSTRUCTION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS
*FOR NON-MUSIC STUDENTS ONLY
SECTIONS A-B--FIRST SEMESTER
SECTIONS C-J--SECOND SEMESTER
SECTION K --THIRD SEMESTER
SECTIONS L-R--FOURTH SEMESTER

00929	LAB-DISC	A	8	TUWTHF	5	P A		RUPPEL
00930	LAB-DISC	B	9	TUWTHF	5	P A		RUPPEL

ENSEMBLE COURSES

NOTE--ALL ENSEMBLE COURSES REQUIRE CONSENT OF INSTRUCTOR.

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 250 UNIVERSITY ORCHESTRA.
1/2 HOUR

00931	PRACT	A	730-930PM	TU		I U BALLROOM		BONE

MUSIC 261 UNIVERSITY CHORUS.
NOTE--OPEN TO STUDENTS, FACULTY AND TOWNSPEOPLE.
1/2 HOUR

00932	PRACT	A	12	TUWTHF	25	S M H		DECKER, STEINITZ

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 350 ADVANCED ENSEMBLE MUSIC.
PREREQUISITE--REGISTRATION IN APPLIED MUSIC AT THE 300 LEVEL AND CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT, SUMMER--1 HOUR OR 1/4 UNIT
*SECTION A IS FOR INSTRUMENTAL, SECTION B FOR OPERATIC, SECTION C FOR COLLEGIUM.

00933	PRACT	A	ARR		105	S A		FARRELL

MUSIC LITERATURE COURSES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
MUSIC 320     PROSEMINAR.
        PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC OR MUSIC
        EDUCATION, CONSENT OF INSTRUCTOR.
        *STUDENTS MAY ACCUMULATE 8 HOURS OR 2 UNITS.
        *2 OR 4 HOURS, OR 1/2 OR 1 UNIT
        *REHEARSAL HOURS TO BE ARRANGED.
       00934   CONF        A    ARR                    102  H A            RINGER AND
                                                                           GRADUATE
                                                                           FACULTY
       00937   LECT-DISC   B       2          TUWTHF     8  S A            JOHNSTON
       00938   LECT-DISC   C     *10         MTUWTHF   116  1203 W NEV     MARTIRANO
```

COURSES FOR GRADUATES

```
MUSIC 420     SEMINAR IN MUSIC LITERATURE.
        REQUIRED OF ALL STUDENTS ENROLLED IN THE DOCTORAL MUSICAL
        ARTS PROGRAM.
        PREREQUISITE--CONSENT OF INSTRUCTOR.
        *STUDENTS MAY ACCUMULATE TWO UNITS.
        *1 UNIT
       00939   LECT-DISC   A       3-5        TU TH    101  H A            RINGER

MUSIC 421     SEMINAR IN MUSIC EDUCATION.
        REQUIRED OF ALL CANDIDATES FOR THE DOCTOR OF EDUCATION DEGREE IN
        MUSIC EDUCATION.
        PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF
        INSTRUCTOR.
        1 UNIT
       00940   LECT-DISC   A       9          TUWTHF   116  1203 W NEV     BERGETHON

MUSIC 424     BACH, I.
        PREREQUISITE--REPRESENTATIVE THEORY AND HISTORY COURSES REQUIRED FOR
        THE BACHELOR OF MUSIC DEGREE.
        1/2 OR 1 UNIT
       00941   LECT-DISC   A       3-5         W  F    101  H A            STEINITZ
```

NUCLEAR ENGINEERING

```
DEPARTMENT OFFICE                                  264 M E B
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
NUC E 397     RADIOCHEMISTRY.
              SAME AS CHEM. 397.
        PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR CONSENT OF
        INSTRUCTOR.
        3 HOURS, OR 3/4 UNIT
        *ONE ADDITIONAL HOUR TO BE ARRANGED.
       00942   LECT-DISC         *10         MTUWTHF   137  ADMIN

NUC E 398     RADIOCHEMISTRY LABORATORY.
              SAME AS CHEM. 398.
        PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY OR CONSENT OF
        INSTRUCTOR.
        2 HOURS, OR 1/2 UNIT
       00943   CONF                1          TU       162  N L
       00943   LAB                 2-5        TU TH     20  N L
```

NUC E 451 REACTOR LABORATORY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

00944	LECT-DISC		11	M W F	203	N E L		HANG
00945	LAB	A	1-5	M W	NUC REACTOR LAB			HANG
00946	LAB	B	1-5	TU TH	NUC REACTOR LAB			HANG

NUC E 454 NUCLEAR ENGINEERING LABORATORY INVESTIGATIONS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 1/2 UNITS

00947	CONF	ARR		STAFF

NUC E 460 REACTOR KINETICS.
PREREQUISITE--NUC.E. 401 AND 455 OR CONSENT OF INSTRUCTOR.
1 UNIT

00948	LECT-DISC	9	MTUWTHF	203	N E L	
00948	LAB	1-5	F	261	E E B	

NUC E 490 SPECIAL TOPICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
E - THERMONUCLEAR
*ONE ADDITIONAL HOUR TO BE ARRANGED.

00949	LECT-DISC	*10	MTUWTHF	203	N E L	

NUC E 495 NUCLEAR ENGINEERING PROBLEMS.
PREREQUISITE--AT LEAST THREE UNITS OF GRADUATE WORK AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

00950	CONF	ARR		STAFF

NUC E 497 SEMINAR IN NUCLEAR SCIENCE AND ENGINEERING.
0 OR 1/4 UNIT

00951	LECT-DISC	11	TH	203	N E L	STAFF

NUC E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00952	CONF	ARR		STAFF

PHILOSOPHY

DEPARTMENT OFFICE 105 G H

MAJOR--TWENTY HOURS FROM ANY COURSES OFFERED BY THE DEPARTMENT, INCLUDING PHIL. 102, 303, 306, 321, AND ONE ADDITIONAL 300 COURSE IN PHILOSOPHY.

MINORS--TWENTY HOURS SELECTED FROM THE COURSES OF ANY ONE OR TWO DEPARTMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES EXCLUDING RHET. 101, 102, AND FIRST-YEAR MODERN LANGUAGE COURSES, OR FROM ANY APPROVED L A S INTERDEPARTMENTAL CURRICULUM, OR FROM ECONOMICS, EDUCATION, HOME ECONOMICS, LAW, OR LIBRARY SCIENCE. IF TWO DEPARTMENTS OR CURRICULA ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH, AND THE COURSES MUST BE APPROVED BY THE DEPARTMENT OF PHILOSOPHY.

COURSES FOR UNDERGRADUATES

FRESHMAN JAMES SCHOLARS ARE AUTOMATICALLY PERMITTED TO TAKE ANY 100 LEVEL PHILOSOPHY COURSE.

PHIL 101 INTRODUCTION TO PHILOSOPHY.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

00953	LECT-DISC	C	10-12	M	W	F	321	G	H
00954	LECT-DISC	E	1-3	M	W	F	321	G	H

PHIL 102 LOGIC.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

00955	LECT-DISC	C	10-12	M	W	F	311	G	H
00956	LECT-DISC	F	2-4	M	W	F	311	G	H

PHIL 105 MORAL IDEAS AND PRACTICE.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
*CREDIT IS NOT GIVEN FOR BOTH PHIL. 105 AND 103.
*2 HOURS

00957	LECT-DISC	B	840-10	M	W	F	311	G	H
00958	LECT-DISC	D	1240-2	M	W	F	311	G	H

COURSES FOR ADVANCED UNDERGRADUATES

PHIL 201 READING COURSE.
PREREQUISITE--JUNIOR OR SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

00959	CONF	ARR

PHIL 202 THESIS.
PREREQUISITE--SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

00960	CONF	ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOPHOMORE JAMES SCHOLARS WHO HAVE HAD NO PHILOSOPHY COURSES ARE PERMITTED TO TAKE PHIL. 303, 306, 307, AND 308. THOSE WHO HAVE HAD A PHILOSOPHY COURSE MAY TAKE ANY 300-LEVEL PHILOSOPHY COURSE.

PHIL 307 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS, OR 1/2 UNIT

00961	LECT-DISC		10	M	W	F	113	G	H

PHIL 308 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS, OR 1/2 UNIT

00962	LECT-DISC		11	M	W	F	43	G	H

PHIL 311 PHILOSOPHIC IDEAS OF THE NINETEENTH AND TWENTIETH CENTURIES.
3 HOURS, OR 3/4 OR 1 UNIT

00963	LECT-DISC		8-10	M	W	F	321	G	H

PHIL 330 THEORY OF KNOWLEDGE.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT

00964	LECT-DISC		1-3	M	W	F	113	G	H

PHIL 335 SOCIAL PHILOSOPHY.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT
00965 LECT-DISC 1-3 M W F 205 G H

PHIL 337 SEMANTICS.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT
00966 LECT-DISC 2-4 M W F 43 G H

COURSES FOR GRADUATES

PHIL 483 INDIVIDUAL TOPICS.
*NOT MORE THAN 1 UNIT MAY BE COUNTED TOWARD M.A. DEGREE AND NOT MORE THAN 2 TOWARD PH. D.
*1/2 OR 1 UNIT, SUMMER--1/2 TO 2 UNITS
00967 CONF ARR

PHIL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
00968 CONF ARR

PHYSICAL EDUCATION FOR MEN

MEN ENTERING THE UNIVERSITY WITH LESS THAN SIXTY SEMESTER HOURS OF CREDIT--EXCEPT VETERANS WHO RECEIVE CREDIT BECAUSE OF MILITARY SERVICE, BUT WHO MAY ELECT TO TAKE PHYSICAL EDUCATION--ARE REQUIRED TO OBTAIN CREDIT FOR FOUR SEMESTERS OF PHYSICAL EDUCATION, INCLUDING THE AMOUNT TRANSFERRED. ONE OF THE COURSES MUST BE PEM 100, WHICH WILL BE TAKEN IN THE FRESHMAN YEAR. CREDIT MAY BE OBTAINED BY PASSING COURSES LISTED BELOW OR BY PASSING PROFICIENCY EXAMINATION WHICH ARE OFFERED AT TIMES SPECIFIED BY THE DEPARTMENT. PERMITS FOR TAKING PROFICIENCY EXAMINATIONS MUST BE SECURED IN ROOM 201 MENS OLD GYMNASIUM NOT LATER THAN 48 HOURS PRECEDING EACH EXAMINATION. STUDENTS ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS IN COURSES IN WHICH THEY ARE CURRENTLY REGISTERED. STUDENTS ENROLLED IN PRESCRIBED EXERCISE ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS WITHOUT SPECIAL WRITTEN PERMISSION FROM THE COORDINATOR OF PRESCRIBED EXERCISE.

OFFICE FOR BASIC INSTRUCTION COURSES--201 MENS OLD GYMNASIUM.

OFFICE FOR PROFESSIONAL COURSES--119 HUFF GYMNASIUM.

BASIC-INSTRUCTION COURSES FOR UNDERGRADUATES

P E M 101 PRESCRIBED EXERCISE.
PREREQUISITE--ASSIGNMENT BY THE HEALTH SERVICE.
STUDENTS MAY ACCUMULATE 4 HOURS.
1 HOUR
00969 LAB 2 M W F 106 MOG ANNEX

P E M 135 TENNIS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
00970 LAB 1-3 TU TH GREGORY COURTS
NOTE--FIRST CLASS MEETING WILL BE HELD IN NORTH BALCONY HUFF GYM.

P E M 136 BADMINTON.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
00971 LAB 3-5 M W 100 H G

P E M 137 BOWLING.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
00972 LAB 1-3 M W 40 IU ALLEYS

P E M 138 GOLF.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
00973 LAB 10-12 TU TH FLD C H G
NOTE--FIRST CLASS MEETING WILL BE HELD IN WEST BALCONY, HUFF GYM.

P E M 140 CANOEING AND SMALL CRAFT OPERATION.
PREREQUISITE--ABILITY TO SWIM REASONABLY WELL 25 YARDS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
00974 LAB 3-5 TU TH CRYSTAL LAKE
NOTE--FIRST CLASS MEETING WILL BE HELD IN 202 MENS OLD GYM.

P E M 142 BALLROOM DANCE.
SAME AS P.E.W. 142.
1 HOUR
00975 LAB 7-9PM TU TH 310 W GYM

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E M 213 ADVANCED FOOTBALL.
PREREQUISITE--P.E.M. 152.
1 HOUR
LAST FOUR WEEKS OF SUMMER SESSION.
00976 LECT-DISC 7 MTUWTH 209 H G BAKER

P E M 214 ADVANCED BASKETBALL.
PREREQUISITE--P.E.M. 151.
1 HOUR
FIRST FOUR WEEKS OF SUMMER SESSION.
00977 LECT-DISC 7 MTUWTH 209 H G BRAUN

P E M 217 THEORY OF COACHING.
PREREQUISITE--P.E.M. 213 AND P.E.M. 214, OR CONSENT OF INSTRUCTOR.
2 HOURS
00978 LECT-DISC 8 MTUWTH 211 H G FLETCHER

PHYSICAL EDUCATION

DEPARTMENT OFFICE 121 HUFF GYM

COURSES FOR GRADUATES

P E 401 ADMINISTRATION OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--P.E.M. OR P.E.W. 204 OR EQUIVALENT.
1 UNIT
00979 LECT-DISC 9 MTUWTH 207 H G ZEIGLER

P E 402 HISTORY OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--P.E.M. OR P.E.W. 209 OR EQUIVALENT.
1 UNIT
00980 LECT-DISC 8 MTUWTH 207A H G FLATH

P E 406 PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT
PREREQUISITE--PHIL. 101--HP. ED. 305 OR CONSENT OF INSTRUCTOR.
1 UNIT
00981 LECT-DISC 10 MTUWTH 207A H G VANDERZWAAG

P E 407 SPORT PSYCHOLOGY.
PREREQUISITE--PSYCH. 100, ED. PSY. 211, CONSENT OF INSTRUCTOR.
1 UNIT

00982	LECT-DISC	11	MTUWTH	207B	W GYM	YOUNG

P E 408 PRINCIPLES OF KINESIOTHERAPY.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, AND PHYSIOLOGY OF EXERCISE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*THREE ADDITIONAL HOURS IN EXERCISE THERAPY CLINIC 3-6 MWF AFTERNOON

00983	LECT-DISC	8	MTUWTH	106	MOG ANN	SHELTON

P E 451 SCIENTIFIC FOUNDATIONS OF PHYSICAL FITNESS.
PREREQUISITE--UNDERGRADUATE ANATOMY AND PHYSIOLOGY, TESTS AND MEASUREMENTS.
1 UNIT
*FOUR ADDITIONAL HOURS TO BE ARRANGED.

00984	LECT-DISC	*10	MTUWTH	209	H G	CURETON

P E 452 SCIENTIFIC ANALYSIS OF PHYSICAL EDUCATION ACTIVITIES.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, ELEMENTARY PHYSICS, ALGEBRA AND TRIGONOMETRY, OR CONSENT OF INSTRUCTOR.
1 UNIT
*TWO ADDITIONAL HOURS 2-4 WEDNESDAY OR ARRANGE.

00985	LECT-DISC	9	MTUWTH	209	H G	NOBLE CURETON

P E 490 SEMINAR.
NO CREDIT

00986	LECT-DISC	7-9PM	TU TH	209	H G	CURETON, FLATH, VANDERZWAAG, YOUNG, ZEIGLER

P E 493 SPECIAL PROJECTS.
PREREQUISITE--DOCTORAL CANDIDATE.
1/2 OR 1 UNIT
*SECTION 1 IS A SIGNIFICANT FORMS OF MOVEMENT PRACTICUM MEETING FROM JUNE 22 TO JULY 2--CREDIT 1/2 UNIT.
*SECTION 2 IS A SOCIOLOGY OF SPORT PRACTICUM MEETING FROM JULY 6 TO JULY 16--CREDIT 1/2 UNIT.

00987	CONF	ARR				STAFF
00988	LECT-DISC *1	130-330	MTUWTH	133	ARMORY	METHENY
00989	LECT-DISC *2	130-330	MTUWTH	133	ARMORY	LUSCHEN

P E 495 TECHNIQUES OF RESEARCH IN HEALTH, PHYSICAL EDUCATION, AND RECREATION.
1 UNIT
*FOUR ADDITIONAL HOURS IN LABORATORY SESSION BY APPOINTMENT.

00990	LECT-DISC	*11	MTUWTH	209	H G	NOBLE

P E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00991	CONF	ARR	STAFF

PHYSICAL EDUCATION FOR WOMEN

DEPARTMENT OFFICE 117 W GYM

FRESHMEN AND SOPHOMORES--OF THE FOUR SEMESTERS REQUIRED IN PHYSICAL EDUCATION, THE DEPARTMENT REQUIRES ONE SEMESTER OF BASIC MOVEMENT-PEW 100, WHICH WILL BE TAKEN IN THE FRESHMAN YEAR AND RECOMMENDS ONE SEMESTER OF SWIMMING--P E W 110 OR 111. ANY COURSE NOT PREVIOUSLY TAKEN MAY BE TAKEN IN THE TWO REMAINING SEMESTERS.

SERVICE COURSES FOR UNDERGRADUATES

P E W 110 ELEMENTARY SWIMMING.
1 HOUR

00992	LAB	F	1	MTUWTH	116	E B POOL	HARRIS

P E W 111 SUB-INTERMEDIATE SWIMMING.
1 HOUR

00993	LAB	G	2	MTUWTH	116	E B POOL	HARRIS
00994	LAB	H	3	MTUWTH	116	E B POOL	PHIPPS

P E W 112 INTERMEDIATE SWIMMING.
1 HOUR

00995	LAB	H	3	MTUWTH	116	E B POOL	PHIPPS

P E W 130 BADMINTON.
1 HOUR

00996	LAB	G	2	MTUWTH	310	W GYM	PHIPPS

P E W 131 GOLF.
1 HOUR

00997	LAB	P	11-1	TU TH	11	W GYM	HARRIS

P E W 136 TENNIS.
1 HOUR

00998	LAB	A	8	MTUWTH	310	W GYM	ALY
00999	LAB	D	11	MTUWTH	310	W GYM	ALY

P E W 142 BALLROOM DANCE.
SAME AS P.E.M. 142.
1 HOUR

01000	LAB	L	7-9PM	TU TH	310	W GYM	PHIPPS

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E W 220 PHYSICAL EDUCATION FOR THE CLASSROOM TEACHER.
SAME AS P.E.M. 220.
PREREQUISITE--JUNIOR STANDING, NON-PHYSICAL EDUCATION MAJOR.
2 HOURS

01001	LAB-DISC	A	8	MTUWTHF	311	W GYM	DROM

PHYSICS

DEPARTMENT OFFICE 211 P B

ENGINEERING PHYSICS CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.CURRICULUM IN PHYSICS--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.GENERAL CURRICULUM MAJOR--TWENTY HOURS IN PHYSICS, INCLUDING PHYSICS 321, 341, AND 342, AND EXCLUDING COURSES WITH NUMBERS LOWER THAN 270.

L.A.S.GENERAL CURRICULUM MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH NOT LESS THAN EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, CHEMISTRY, EDUCATION, GEOLOGY, MATHEMATICS, ZOOLOGY OR ANY ONE BRANCH OF ENGINEERING.

PHYSICS 101 AND 102 ARE RECOMMENDED TO PREMEDICAL, PRELENTAL, ARCHITECTURE, AND OTHER STUDENTS NOT SPECIALIZING IN PHYSICS, MATHEMATICS, CHEMISTRY OR ENGINEERING.

THE CALCULUS PREREQUISITE FOR CERTAIN COURSES MAY BE SATISFIED EITHER BY MATH. 132 AND 142, OR MATH. 133 AND 143.

COURSES FOR UNDERGRADUATES

PHYCS 106 GENERAL PHYSICS--MECHANICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--MATH. 122, 123--CREDIT OR REGISTRATION IN MATH, 132 OR 133.
4 HOURS

01002	LECT		10	MTUWTH	141	P	B
01003	QUIZ	A	1-3	TU TH	232	P	B
01003	LAB	A	1-3	M W	232	P	B
01004	QUIZ	B	3-5	TU TH	232	P	B
01004	LAB	B	3-5	M W	232	P	B

PHYCS 107 GENERAL PHYSICS--HEAT, ELECTRICITY, AND MAGNETISM.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 106, CREDIT OR REGISTRATION IN MATH. 142 OR 143.
4 HOURS

01005	LECT		11	MTUWTH	151	P	B
01005	QUIZ		2-4	TU TH	234	P	B
01005	LAB		2-4	M W	234	P	B

PHYCS 108 GENERAL PHYSICS--WAVE MOTION, SOUND, LIGHT, AND MODERN PHYSICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN MATH. 142 OR 143
4 HOURS

01006	LECT		8	TUWTHF	151	P	B
01006	QUIZ		1-3	TU TH	236	P	B
01006	LAB		1-3	W F	236	P	B

COURSES FOR GRADUATES

PHYCS 497 INDIVIDUAL STUDY.
1/2 OR 1 UNIT

01007	CONF	ARR	STAFF

PHYCS 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

01008	CONF	ARR	STAFF

PHYSIOLOGY

DEPARTMENT OFFICE 524 BUR HALL

MAJOR--THE MAJOR CONSISTS OF TWENTY HOURS IN ANIMAL PHYSIOLOGY OR CLOSELY RELATED SUBJECTS LISTED IN THE LAST SENTENCE BELOW, NOT INCLUDING ELEMENTARY COURSES, AND INCLUDING PHYSL. 301 AND PHYSL 302. BECAUSE PHYSIOLOGY REQUIRES AN UNDERSTANDING OF PHYSICAL AND BIOLOGICAL SCIENCE, THE STUDENTS PROGRAM MUST INCLUDE A YEAR OF GENERAL BIOLOGY, INCLUDING BOTH ANIMAL AND PLANT BIOLOGY, A SEMESTER OF GENETICS, MATHEMATICS THROUGH ELEMENTARY CALCULUS, TWO SEMESTERS OF PHYSICS, AND FOUR SEMESTERS OF CHEMISTRY INCLUDING GENERAL, INORGANIC, ORGANIC AND QUANTITATIVE CHEMISTRY. MICROBIOLOGY, EMBRYOLOGY, HISTOLOGY, PHYSICAL CHEMISTRY AND BIOCHEMISTRY ARE RECOMMENDED STRONGLY. WITH THE APPROVAL OF THE ADVISER, UPPER DIVISION COURSES IN GENETICS, BIOCHEMISTRY, BIOPHYSICS, AND PLANT PHYSIOLOGY MAY BE COUNTED TOWARD THE MAJOR.

MINOR--TWENTY HOURS MAY BE CHOSEN FROM PHYSICS, CHEMISTRY, MICROBIOLOGY OR ZOOLOGY, PROVIDED AT LEAST 8 SEMESTER HOURS ARE OFFERED IN THE LESSER, IF TWO MINORS ARE CHOSEN.

HONORS--STUDENTS WORKING TOWARD DEPARTMENTAL DISTINCTION MUST ENROLL IN PHYSIOLOGY 290 READING COURSE, WORK WITH AN ADVISER FOR AT LEAST TWO SEMESTERS, AND TAKE A GENERAL EXAMINATION IN THE LAST SEMESTER OF THE SENIOR YEAR.

COURSES FOR UNDERGRADUATES

PHYSL 103 INTRODUCTION TO HUMAN PHYSIOLOGY.
*CREDIT IS NOT GIVEN IN PHYSL. 103 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

01009	LECT		1	MTUWTHF	140	BUR HALL	TAYLOR
01010	LAB-DISC	1	2-4	M W	434	BUR HALL	
		1	2-4	TU TH	436	BUR HALL	
01011	LAB-DISC	2	2-4	TU TH	434	BUR HALL	
		2	2-4	M W	436	BUR HALL	
01012	LAB-DISC	3	2-4	M W	422	BUR HALL	
		3	2-4	TU TH	444	BUR HALL	
01013	LAB-DISC	4	2-4	TU TH	422	BUR HALL	
		4	2-4	M W	444	BUR HALL	

COURSES FOR ADVANCED UNDERGRADUATES

PHYSL 290 READING COURSE.
PREREQUISITE--A COURSE IN PHYSIOLOGY, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS
NOTE--THIS COURSE IS NOT LIMITED TO HONORS STUDENTS.

01014	CONF	&	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PHYSL 302 EXPERIMENTAL ANIMAL PHYSIOLOGY.
SAME AS ZOOL. 302.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS, AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

01015	LECT		8	MTUWTHF	140	BUR HALL	ANDERSON
01016	LAB	1	9-12	MTUW	523	BUR HALL	
01017	LAB	2	2-5	MTUW	523	BUR HALL	

COURSES FOR GRADUATES

PHYSL 491 INDIVIDUAL TOPICS.
PREREQUISITE--APPROVAL OF DEPARTMENT.
1/2 TO 2 UNITS

01018	CONF		ARR	STAFF

PHYSL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

01019	CONF		ARR	STAFF

PLANT PATHOLOGY

DEPARTMENT OFFICE 218 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PL PA 300 SPECIAL PROBLEMS.
UNDERGRADUATE PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
*MAXIMUM CREDIT EIGHT HOURS OR TWO UNITS.
*2 TO 4 HOURS, OR 1/4 TO 1 UNIT

BEVER, BLACK, BRITTON, CARTER, CHAMBERLAIN, GERDEMANN GOTTLIEB, LINN, POWELL, SHAW, SHURTLEFF, TAYLOR, THORNBERRY

01020 CONF ARR

COURSES FOR GRADUATES

PL PA 499 THESIS RESEARCH.
PREREQUISITE--PL. PA. 301 AND 302 OR EQUIVALENT.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

BEVER, BLACK, BRITTON CARTER, CHAMBERLAIN, GERDEMANN, GOTTLIEB, LINN, POWELL, SHAW, TAYLOR, THORNBERRY

01021 CONF ARR

POLITICAL SCIENCE

DEPARTMENT OFFICE 325 L H

MAJOR--TWENTY HOURS FROM COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE. A MAJOR MAY INCLUDE THREE SEMESTER HOURS FROM THE FOLLOWING COURSES--ECONOMICS 170, 171--STATISTICS--, ECONOMICS 214--PUBLIC FINANCE--, HISTORY 345, 346, 369, 370--CONSTITUTIONAL HISTORY--, MATHEMATICS 161--STATISTICS--, PSYCHOLOGY 135--STATISTICS AND SOCIOLOGY 185--STATISTICS--. NO STUDENT ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1961, MAY OFFER MORE THAN EIGHT HOURS OF 100 LEVEL COURSES AS PART OF A POLITICAL SCIENCE MAJOR.

MINOR--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, EDUCATION, FINANCE, GEOGRAPHY, HISTORY, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY, AND SPEECH. ONE OF THE CURRICULA IN LATIN-AMERICA STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR.

STUDENTS ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1963, MAY NOT OFFER MORE THAN EIGHT HOURS OF 100-LEVEL COURSES AS PART OF A MINOR, EXCEPT THAT MATHEMATICS 123 OR HIGHER-NUMBERED MATHEMATICS COURSES ARE NOT COUNTED IN THIS LIMITATION.

POLITICAL SCIENCE 150 AND 151 GIVE A GENERAL SURVEY OF NATIONAL, STATE AND LOCAL GOVERNMENT IN THE UNITED STATES. POLITICAL SCIENCE 191 AND 192 PRESENT A SURVEY OF THE BASIC CONCEPTS AND METHODS OF POLITICAL SCIENCE AND OF SIGNIFICANT CURRENT GOVERNMENTAL AND POLITICAL PROBLEMS AND POLICIES. UNDERGRADUATES BEGINNING THE STUDY OF POLITICAL SCIENCE ARE ADVISED TO TAKE, FIRST, EITHER POLITICAL SCIENCE 150 OR 191. STUDENTS PLANNING TO DO ADVANCED WORK SHOULD TAKE, DURING THE SOPHOMORE YEAR, EITHER 150 OR 191 AND FOLLOW IT WITH SUCH OTHER COURSES AS COMPLETE ONE OF THE FOLLOWING COMBINATIONS 150 AND 151, 150 AND 192, 150 AND 184, 184 AND 191, OR 191 AND 192.

COURSES FOR UNDERGRADUATES

POL S 150 AMERICAN GOVERNMENT--ORGANIZATION AND POWERS.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH POL. S. 150 AND 191.
*3 HOURS
*FOR JAMES SCHOLARS AND OTHER STUDENTS HAVING A GRADE AVERAGE OF 4.0 OR ABOVE.

01022	LECT-DISC	A	8	MTUWTHF	192	L	H	GARVEY
		A	7	W	192	L	H	
01023	LECT-DISC	D	11	MTUWTHF	192	L	H	ROADY
		D	12	TU	192	L	H	

COURSES FOR ADVANCED UNDERGRADUATES

POL S 291 THESIS AND HONORS COURSE.
PREREQUISITE--OPEN ONLY TO SENIORS WHOSE MAJOR IS POLITICAL SCIENCE AND WHO HAVE A GENERAL UNIVERSITY AVERAGE OF AT LEAST 4.0.
2 TO 5 HOURS

01024	CONF	&	ARR					STAFF

POL S 293 SELECTED TOPICS IN POLITICAL SCIENCE.
2 TO 4 HOURS

01025	CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

POL S 326 AMERICAN POLITICAL PARTIES.
PREREQUISITE--POL. S. 150 OR 191 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

01026	LECT-DISC		9	MTUWTHF	327	G	H	ROADY
			2	TH	327	G	H	ROADY

POL S 371 WORLD INTERNATIONAL ORGANIZATION.
3 HOURS, OR 1/2 OR 1 UNIT

01027	LECT-DISC		8	MTUWTHF	327	G	H	KAMENETSKY
			2	TU	327	G	H	KAMENETSKY

POL S 383 SOVIET FOREIGN POLICY.
3 HOURS, OR 1/2 OR 1 UNIT

01028	LECT-DISC		11	MTUWTHF	327	G	H	KAMENETSKY
			12	TH	327	G	H	KAMENETSKY

POL S 390 METHODS OF POLITICAL ANALYSIS.
PREREQUISITE--POL. S. 150 OR 191 OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

01029	LECT-DISC		1-3	M W	327	G	H	MONYPENNY

COURSES FOR GRADUATES

POL S 450 CONTEMPORARY GOVERNMENTAL PROBLEMS.
*STUDENTS MAY ACCUMULATE THREE UNITS.
*1 UNIT
01030 LECT-DISC 10-12 M W 398 L H GARVEY

POL S 466 CURRENT ADMINISTRATIVE THEORY.
1 UNIT
01031 LECT-DISC 8-10 TU TH 398 L H MONYPENNY

POL S 493 RESEARCH IN SELECTED TOPICS.
1 UNIT
01032 CONF ARR STAFF

POL S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
01033 CONF ARR STAFF

PORTUGUESE

DEPARTMENT OFFICE 224 L H

COURSES FOR GRADUATES

PORT 491 SPECIAL TOPICS IN PORTUGUESE.
1/2 OR 1 UNIT
01034 CONF ARR ALLEN

PORT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
01035 CONF ARR ALLEN

PSYCHOLOGY

DEPARTMENT OFFICE 316 G H

MAJOR--TWENTY HOURS IN PSYCHOLOGY, EXCLUDING PSYCH. 100 AND 103, AND D.G.S. 171. TWO TYPES OF MAJOR PROGRAMS ARE OFFERED--THE GENERAL MAJOR, SUITABLE FOR STUDENTS INTERESTED PRIMARILY IN GENERAL LIBERAL EDUCATION, AND THE HONORS MAJOR, DESIGNED MAINLY TO PREPARE STUDENTS FOR GRADUATE STUDY IN PSYCHOLOGY.

GENERAL MAJOR--IN THIS PROGRAM THERE ARE NO PRESCRIBED COURSES.

HONORS MAJOR--THIS PROGRAM MUST INCLUDE PSYCHOLOGY 135, 290, AND TWO OF THE FOLLOWING COURSES--PSYCH. 330, 331, 345, 360, WITH THE CONSENT OF THE MAJOR ADVISOR, THE EQUIVALENT OF ANY OF THESE COURSES MAY BE SUBSTITUTED. THE HONORS MAJOR IS STRONGLY URGED TO TAKE--A - WORK IN H SECTIONS, WHEN AVAILABLE, AND IN ADVANCED COURSES IN PSYCHOLOGY, B - MATHEMATICS THROUGH CALCULUS, C - AT LEAST A FULL YEAR LABORATORY COURSE IN ANOTHER SCIENCE, D - AT LEAST TWO YEARS OF FRENCH, GERMAN, OR RUSSIAN, WITH TWO YEARS IN EACH OF TWO OF THESE BEING HIGHLY DESIRABLE.

MINORS--TWENTY HOURS IN ONE OF TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, CHEMISTRY, ECONOMICS, EDUCATION, HISTORY, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PHYSICS, PHYSIOLOGY, POLITICAL SCIENCE, SOCIAL WORK, SOCIOLOGY, SPEECH, AND ZOOLOGY.

DEPARTMENTAL DISTINCTION--THE MINIMUM REQUIREMENTS FOR GRADUATION WITH DEPARTMENTAL DISTINCTION IN PSYCHOLOGY ARE AS FOLLOWS--A - ELIGIBILITY FOR COLLEGE HONORS, B - SATISFACTORY COMPLETION OF THE COURSES REQUIRED IN THE HONORS MAJOR PROGRAM, C - FOUR HOURS OF CREDIT IN PSYCHOLOGY 291-292, INCLUDING AN ACCEPTABLE THESIS.

COURSES FOR UNDERGRADUATES

PSYCH 100 INTRODUCTION TO PSYCHOLOGY.
NOT OPEN TO STUDENTS ELECTING PSYCH. 103 OR D.G.S. 171.
REQUIRES FIVE HOURS OF PARTICIPATION IN LABORATORY EXPERIMENTS
4 HOURS
*STUDENTS IN LECT. A MUST ELECT A QUIZ SECTION A, IN LECT. B, A QUIZ SECTION B, ETC.

01036	LECT	A	B	MTUWTHFS	100	G	H	DULANY AND MCALLISTER MCALLISTER
01037	QUIZ	A1	9	TU TH	313	G	H	
01038	QUIZ	A2	10	TU TH	313	G	H	
01039	QUIZ	A3	11	TU TH	313	G	H	
01040	LECT	B	11	MTUWTHFS	100	G	H	DULANY AND MCALLISTER
01041	QUIZ	B1	8	M W	313	G	H	
01042	QUIZ	B2	9	M W	313	G	H	
01043	QUIZ	B3	10	M W	313	G	H	

COURSES FOR ADVANCED UNDERGRADUATES

PSYCH 250 PSYCHOLOGY OF PERSONALITY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 150 AND 250.
*3 HOURS

01044	LECT		11	MTUWTHFS	315	G	H	J BECKER

PSYCH 255 SOCIAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 101 AND 255.
*3 HOURS
*SECTION &H IS OFFERED IN THE SPECIAL INTEREST OF AND IS LIMITED TO JAMES SCHOLARS, HONORS CANDIDATES, AND STUDENTS WHOSE GRADE-POINT AVERAGE IS 4.0 OR BETTER.

01045	LECT		9	MTUWTHFS	315	G	H	SUEDFELD

PSYCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE-POINT AVERAGE OF 4.0, AND WRITTEN CONSENT OF THE INSTRUCTOR--IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

01046	CONF		ARR	STAFF

PSYCH 294 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE-POINT AVERAGE OF 4.0, AND WRITTEN CONSENT OF THE INSTRUCTOR, IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

01047	CONF		ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PSYCH 338 ABNORMAL PSYCHOLOGY.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY, JUNIOR STANDING EXCEPT FOR THOSE IN THE PREMEDICAL CURRICULUM WHO MAY TAKE THE COURSE AS SECOND SEMESTER SOPHOMORES WITH FOUR HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

01048	LECT	8-10	TUWTH	317	G H	J BECKER

PSYCH 390 PSYCHOLOGICAL TESTS AND MEASUREMENTS.
PREREQUISITE--PSYCH. 235.
4 HOURS OR 1 UNIT

01049	LECT-DISC	10-12	TU TH	317	G H	MEREDITH
01049	LAB	1-5	M W	443	G H	

COURSES FOR GRADUATES

NOTE--THE PREREQUISITES STATED APPLY TO GRADUATE MAJORS IN PSYCHOLOGY. STUDENTS MINORING IN PSYCHOLOGY MAY, BY SPECIAL PERMISSION OF INSTRUCTORS, ENROLL IN CERTAIN OF THESE COURSES WITHOUT HAVING MET ALL OF THE PREREQUISITES.

PSYCH 441 PERSONALITY AND BEHAVIOR DYNAMICS.
PREREQUISITE--TWELVE HOURS OF PSYCHOLOGY.
1/2 UNIT

01050	LECT	1-3	TU TH	317	G H	SHULMAN

PSYCH 451 ADVANCED SOCIAL PSYCHOLOGY.
SAME AS COMM. 451.
PREREQUISITE--TWELVE HOURS OF PSYCHOLOGY, INCLUDING PSYCH. 255 OR EQUIVALENT.
1 UNIT

01051	LECT	1-3	M W	445	G H	SUEDFELD

PSYCH 490 INDIVIDUAL RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

01052	CONF	ARR				STAFF

PSYCH 493 SEMINAR.
PREREQUISITE--SIX UNITS OF GRADUATE CREDIT IN PSYCHOLOGY--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

01053	LECT	1-3	TU TH	445	G H	COSTIN

PSYCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR M.A. THESIS, SECTION B IS FOR PH. D. THESIS.

01054	CONF	ARR				STAFF

RADIO AND TELEVISION

DEPARTMENT OFFICE 1218 G H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R TV 366 ADVANCED RADIO AND TELEVISION PRACTICES, I.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

01055	CONF	ARR				LIPPOLD

R TV 367 ADVANCED RADIO AND TELEVISION PRACTICES, II.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT
01056 CONF ARR LIPPOLD

COURSES FOR GRADUATES

R TV 450 SPECIAL PROBLEMS IN TELEVISION.
PREREQUISITE--A TELEVISION COURSE IN THE AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 UNITS
*1 OR 2 UNITS
01057 CONF ARR LIPPOLD

R TV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN RADIO AND TELEVISION.
1 OR 2 UNITS
01058 CONF ARR STAFF

RECREATION AND MUNICIPAL PARK ADMINISTRATION

DEPARTMENT OFFICE 104 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

REC 278 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
01059 CONF ARR STAFF

REC 279 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS
01060 CONF ARR STAFF

COURSES FOR GRADUATES

REC 402 RECREATION ADMINISTRATION.
PREREQUISITE--BASIC COURSES IN THE ORGANIZATION OF RECREATION OR EQUIVALENT.
1 UNIT
01061 LECT-DISC G 8-10 M W 433 ARMORY BRIGHTBILL

REC 490 SEMINAR.
NO CREDIT
01062 LECT-DISC 10-12 TU TH 207 F A B BRIGHTBILL

REC 499 THESIS RESEARCH.
1/2 TO 2 UNITS
01063 CONF ARR BRIGHTBILL

RHETORIC

INCLUDING RHETORIC AND COMPOSITION, ENGLISH
FOR FOREIGN STUDENTS, AND BUSINESS ENGLISH

RHETORIC AND COMPOSITION

DEPARTMENT OFFICE 100 E B

MAJOR--TWENTY HOURS IN ENGLISH EXCLUDING RHET. 101, 102, 107, 108, 151, 200, 271, 272, ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, AND INCLUDING TEN HOURS OF ENGLISH OR AMERICAN LITERATURE, AT LEAST SIX OF WHICH MUST BE CHOSEN FROM THE ADVANCED GROUPS, AND TEN HOURS IN COMPOSITION CHOSEN FROM RHET. 143, 144, 205 206, 227, 246, 255, 256, 263, 330, AND INCLUDING AT LEAST ONE COURSE IN EXPOSITORY WRITING. WITH THE PERMISSION OF THE ADVISER, ONE OF THE FOLLOWING COURSES MAY BE COUNTED TOWARD A COMPOSITION MAJOR--SPEECH 363, JOURN. 266, 326.
STUDENTS WHO PLAN TO ENTER GRADUATE COLLEGE MUST SATISFY THE REQUIREMENTS OF FOURTEEN HOURS OF COURSES IN ENGLISH AND AMERICAN LITERATURE.

MINOR--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER OF TWO IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC--NOT INCLUDING APPLIED MUSIC--COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE HEAD OF THE DEPARTMENT, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJOR OF THEIR DEPARTMENT EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

DEPARTMENTAL DISTINCTION--A STUDENT MAJORING IN RHETORIC AND COMPOSITION WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT--4.0 OR HIGHER--MAY EARN DISTINCTION ONLY BY OFFERING SIX HOURS OF WORK IN ADDITION TO THE MINIMUM NUMBER OF HOURS REQUIRED FOR THE MAJOR. THIS ADDITIONAL CREDIT MUST INVOLVE A SIGNIFICANT WRITING PROJECT IN RHET. 255 AND THE COMPLETION OF EITHER ENGL. 297 OR ENGL. 298. THE LEVEL OF DISTINCTION--DISTINCTION, HIGH DISTINCTION, HIGHEST DISTINCTION--IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THESE COURSES AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE-POINT AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR, TO RECEIVE HIGHEST DISTINCTION, HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF IN THE OPINION OF HIS INSTRUCTORS AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

COURSES FOR UNDERGRADUATES

RHET 101 FRESHMAN RHETORIC AND COMPOSITION.
•STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
•3 HOURS

01064	LECT-DISC	A1	11	MTUWTHF	110	E	B	
		A1	12	W	110	E	B	
01065	LECT-DISC	B1	9	MTUWTHF	110	E	B	WILSON
		B1	12	TU	110	E	B	
01066	LECT-DISC	C1	10	MTUWTHF	110	E	B	
		C1	12	W	110	E	B	
01067	LECT-DISC	D1	11	MTUWTHF	110	E	B	
		D1	12	TH	110	E	B	

RHET 102 FRESHMAN RHETORIC AND COMPOSITION.
PREREQUISITE--RHET. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

01068	LECT-DISC	B1	9	MTUWTHF	201	E	B	
		B1	12	M	201	E	B	
01069	LECT-DISC	B2	9	MTUWTHF	205	E	B	
		B2	12	M	205	E	B	

RHET 133 PRINCIPLES OF COMPOSITION.
PREREQUISITE--RHET. 102 OR EQUIVALENT.
*CREDIT IS NOT GIVEN FOR RHET. 133 IN ADDITION TO RHET. 143.
*3 HOURS

01070	LECT-DISC	D	11	MTUWTHF	210A	E	B	STEWART
		D	12	W	210A	E	B	

RHET 144 NARRATIVE WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT, SOPHOMORE STANDING.
3 HOURS

01071	LECT-DISC	C	10	MTUWTHF	210A	E	B	CURLEY
		C	12	TU	210A	E	B	

COURSES FOR ADVANCED UNDERGRADUATES

RHET 200 REMEDIAL WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH.
NO CREDIT

01072	LECT-DISC	A1	8	MTUWTHF	210B	E	B	
		A1	12	M	210B	E	B	
01073	LECT-DISC	B1	9	MTUWTHF	210B	E	B	
		B1	12	TU	210B	E	B	
01074	LECT-DISC	B2	9	MTUWTHF	223	E	B	
		B2	12	TU	223	E	B	
01075	LECT-DISC	C1	10	MTUWTHF	210B	E	B	
		C1	12	W	210B	E	B	
01076	LECT-DISC	D1	11	MTUWTHF	210B	E	B	
		D1	12	TH	210B	E	B	

RHET 205 ADVANCED NARRATIVE WRITING, I.
PREREQUISITE--RHET. 144 OR EQUIVALENT.
3 HOURS
1 HOUR CONFERENCE TO BE ARRANGED.

01077	LECT-DISC	C	*10	MTUWTHF	223	E	B	SCOUFFAS

RHET 246 MODERN ENGLISH GRAMMAR.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

01078	LECT-DISC	D	11	MTUWTHF	223	E	B	ASTON
		D	12	M	223	E	B	

RHET 255 CREATIVE WRITING.
STUDENTS MUST SEE THE INSTRUCTOR DURING THE FIRST WEEK OF CLASSES TO ARRANGE A CONFERENCE SCHEDULE.
PREREQUISITE--A PREPARATORY COURSE IN ADVANCED WRITING--RHET. 205, 206, 227, 330, SPCH. 263, 363, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
INSTRUCTORS--CURLEY, FUMENTO, NIMS, QUINN, SCOUFFAS, STONE.
STONE.

01079	CONF		ARR					CURLEY, SCOUFFAS

COURSES FOR GRADUATES

RHET 480 THEORY AND PRACTICE OF ENGLISH COMPOSITION.
1/2 UNIT
STUDENTS TAKING THIS COURSE MUST REGISTER FOR RHET. 101B1.

01080	LECT-DISC	C	10	M W F	117	E	B	WILSON

ENGLISH FOR FOREIGN STUDENTS

DEPARTMENT OFFICE 317 E B

NOTE--NO STUDENT IS PERMITTED TO REGISTER FOR ANY COURSE IN ENGLISH AS A FOREIGN LANGUAGE UNTIL HE HAS TAKEN THE EXAMINATION IN ENGLISH FOR FOREIGN STUDENTS. AUDITORS ARE NOT PERMITTED. RHETORIC 114 AND 115 FULFILL GRADUATION REQUIREMENTS IN RHETORIC. STUDENTS MAY BE REQUIRED TO TAKE MORE ELEMENTARY COURSES BEFORE THEY ARE PERMITTED TO TAKE RHET. 114. ADVISERS SHOULD CONSULT THE UNDERGRADUATE STUDY BULLETIN UNDER THE SECTION ENTITLED--GENERAL REQUIREMENTS FOR GRADUATION-ENGLISH--FOR THE DEFINITION OF A FOREIGN STUDENT.

COURSES FOR UNDERGRADUATES

RHET 110 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS, RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*MAY ALSO BE TAKEN WITH RHET. 111 AND 114.
*NO CREDIT

01081	LECT-DISC	C	10	MTUWTHFS	201	E B	KEEN

RHET 111 ENGLISH AS A FOREIGN LANGUAGE.
PREREQUISITE--RHET. 109, RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
NO CREDIT

01082	LECT-DISC	A	8-10	MTUWTHFS	119	E B	ENATA

RHET 114 ENGLISH AS A FOREIGN LANGUAGE, I.
NOT OPEN TO GRADUATE STUDENTS.
PREREQUISITE--RHET. 111, RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

01083	LECT-DISC	D	11	MTUWTHFS	119	E B	HUSSEY

RHET 115 ENGLISH AS A FOREIGN LANGUAGE, II.
NOT OPEN TO GRADUATE STUDENTS.
PREREQUISITE--RHET. 114 AND/OR RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

01084	LECT-DISC	C	10	MTUWTHFS	119	E B	HUSSEY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

COURSES FOR GRADUATES

RHET 400 ENGLISH AS A FOREIGN LANGUAGE FOR GRADUATE FOREIGN STUDENTS.
PREREQUISITE--GRADUATE STANDING AND RHET. 111, OR CONSENT OF INSTRUCTOR.
3 HOURS, NO GRADUATE CREDIT.

01085	LECT-DISC	E	1-3	M W F	119	E B	KEEN

BUSINESS ENGLISH

DEPARTMENT OFFICE 3178 D K H

151 BUSINESS LETTER WRITING.
PREREQUISITE--RHET. 101 AND 102.
3 HOURS

01086	LECT-DISC	B	9	MTUWTHF	106	D K H	FELTON
		B	2	TU	106	D K H	FELTON
01087	LECT-DISC	C	10	MTUWTHF	306	D K H	MAGUIRE
		C	2	TU	306	D K H	MAGUIRE

RHET 272 REPORT WRITING.
PREREQUISITE--RHET. 101, 102, AND 151, OR CONSENT OF CHAIRMAN OF DIVISION.
2 HOURS

01088	LECT-DISC	B	9	MTUWTH	306	D K H	GIESELMAN
01089	LECT-DISC	C	10	MTUWTH	106	D K H	CHAPDU

RUSSIAN

SLAVIC LANGUAGES AND LITERATURES
DEPARTMENT OFFICE 260 L H

MAJOR--TWENTY HOURS OF RUSSIAN EXCLUDING RUSSIAN 101, 102, 103, AND 104, AND INCLUDING RUSSIAN 201, 202, 211, 212, 213, AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, A MINIMUM OF SIX HOURS IN RUSSIAN 321, 322, 323, 324, 325, AND 332, AND A MINIMUM OF TWO AND A MAXIMUM OF SIX HOURS IN RUSSIAN 309, 310, 312, 331.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH--EXCLUDING RHET. 101 AND 102--, FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GER. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT SUBJECT. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES--WITH THE EXCEPTION OF COURSES IN RUSSIAN--IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

RUSS 101 FIRST-YEAR RUSSIAN, I.
FOR STUDENTS WHO HAVE NO CREDIT IN RUSSIAN.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR RUSS. 101 WITHOUT RUSS. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

01090	LECT-DISC	A	8-10	MTUWTH	9	G H	STAFF

RUSS 102 FIRST-YEAR RUSSIAN, II.
PREREQUISITE--RUSS. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

01091	LECT-DISC	C	10-12	MTUWTH	9	G H	USZYNSKI

COURSES FOR ADVANCED UNDERGRADUATES

RUSS 211 ORAL RUSSIAN, I.
PREREQUISITE--RUSS. 103 AND 104 OR CONSENT OF INSTRUCTOR.
2 HOURS
01092 LECT-DISC F 2 MTUWTH 176 L H MICKLESEN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RUSS 311 ADVANCED RUSSIAN CONVERSATION.
PREREQUISITE--THREE YEARS OF COLLEGE RUSSIAN, INCLUDING RUSS. 211 AND 212, OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/4 UNIT
01093 LECT-DISC G 3 MTUWTH 170 L H USZYNSKI

RUSS 313 ADVANCED RUSSIAN COMPOSITION.
PREREQUISITE--THREE YEARS OF COLLEGE RUSSIAN, INCLUDING RUSS. 213 AND 214, OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/4 UNIT
01094 LECT-DISC H 4 MTUWTH 170 L H USZYNSKI

RUSS 322 READINGS IN RUSSIAN LITERATURE--DOSTOEVSKY, TOLSTOY.
PREREQUISITE--RUSS. 201 AND 202 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
01095 LECT-DISC A 8-10 M W F 170 L H TERRAS

COURSES FOR GRADUATES

RUSS 400 BEGINNING RUSSIAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.
01096 LECT-DISC C 10-12 MTUWTH 215 G H STAFF

RUSS 401 READINGS IN RUSSIAN FOR GRADUATE STUDENTS.
PREREQUISITE--RUSS. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
*SECTION E IS RECOMMENDED FOR HUMANITIES MAJORS.
01097 LECT-DISC A 8-10 MTUWTH 215 G H STAFF
01098 LECT-DISC *E 1-3 MTUWTH 215 G H STAFF

RUSS 405 OLD CHURCH SLAVONIC.
1 UNIT
01099 LECT-DISC C 10-12 M W F 170 L H MICKLESEN

RUSS 414 PUSHKIN.
PREREQUISITE--RUSS. 321.
3/4 UNIT
01100 LECT-DISC E 1-3 M W F 170 L H TERRAS

CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES

DEPARTMENT OFFICE 1207 W OREGON

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

MAJOR--STUDENTS WHO ELECT RUSSIAN LANGUAGE AND AREA STUDIES AS A MAJOR MUST,
1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE SCIENCES AND LETTERS CURRICULUM.
2-COMPLETE AT LEAST TWENTY SEMESTER HOURS OF RUSSIAN LANGUAGE COURSES, IN ADDITION TO RUSS. 101-102, OR DEMONSTRATE EQUIVALENT PROFICIENCY.
3-COMPLETE A MAJOR CONSISTING OF AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST FOUR DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE PROGRAM OF RUSSIAN LANGUAGE AND AREA STUDIES MAY NOT COUNT AS PART OF THIS TWENTY HOURS.

ANTH. 381, 382
ECON. 312
GEOG. 353
HIST. 219, 220, 320, 321
326, 327, 328
LAW. 369
POL. S. 335, 383
RUSS. 309, 310, 312, 321, 322,
323, 324, 325, 332, 333
SOC. 350
UKR. 396, 398

4-COMPLETE A MINOR OF TWENTY HOURS, EXCLUDING COURSES OPEN TO FRESHMEN, IN ONE OR TWO DEPARTMENTS. IF TWO ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH. COURSES IN THE RUSSIAN LANGUAGE MAY, WITH THE APPROVAL OF THE CENTER DIRECTOR, CONSTITUTE ALL OR PART OF THIS MINOR.

RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR--A MINOR IN RUSSIAN LANGUAGE AND AREA STUDIES, DESIGNED TO ACCOMPANY A MAJOR IN ANY DEPARTMENT, REQUIRES AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST THREE DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. IT ALSO REQUIRES A KNOWLEDGE OF RUSSIAN EQUIVALENT AT LEAST TO THAT NORMALLY ATTAINED AFTER RUSS. 101-102.

ANTH. 381, 382
ECON. 312
GEOG. 353
HIST. 219, 220, 320, 321,
326, 327, 328
LAW 369
POL. S. 335, 383
RUSS. 309, 310, 312, 321,
322, 323, 324, 325, 332, 333
SOC. 350
UKR. 396, 398

GRADUATE MINORS IN RUSSIAN LANGUAGE AND AREA STUDIES

MINOR FOR THE MASTERS DEGREE--A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST EARN AT LEAST TWO UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN BELOW. THE COURSES CHOSEN MUST BE IN AT LEAST TWO DEPARTMENTS.

ANTH. 381, 382
ECON. 312
GEOG. 353, 495
HIST. 320, 321, 326, 327
328, 419
LAW. 369
POL. S. 335, 383, 435
RUSS. 309, 310, 312, 321, 322,
323, 324, 325, 332, 333, 405, 410,
412, 413, 415, 416, 417, 421, 423
SOC. 350, 450
UKR. 396, 398

MINOR FOR THE PH.D. DEGREE--A DOCTORAL CANDIDATE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST DEMONSTRATE A READING COMMAND OF RUSSIAN AS TESTED BY EXAMINATION OR BY COMPLETION OF RUSSIAN 104 OR 401 WITH A GRADE OF A OR B, AND IN ADDITION MUST EARN AT LEAST FOUR UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN JUST ABOVE. THE FOUR UNITS MUST BE DISTRIBUTED AMONG AT LEAST TWO DEPARTMENTS, AND MAY INCLUDE UP TO ONE UNIT FROM WITHIN THE DEPARTMENT OFFERING THE CANDIDATES MAJOR.

CERTIFICATE OF GRADUATE SPECIALIZATION IN RUSSIAN LANGUAGE AND AREA STUDIES

THIS CERTIFICATE IS AWARDED BY THE GRADUATE COLLEGE AND THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES. IT IS FOR PERSONS WITH THE BACCALAUREATE WHO ARE ENROLLED IN ADVANCED STUDIES IN ANY DISCIPLINE AND WHO WISH AT THE SAME TIME TO GAIN A KNOWLEDGE OF THE RUSSIAN AREA AND LANGUAGE. THE REQUIREMENTS ARE--1--A GOOD COMMAND OF WRITTEN AND SPOKEN RUSSIAN, AS DETERMINED BY SPECIAL EXAMINATIONS. 2--AT LEAST SIX GRADUATE UNITS RELATING TO RUSSIA, DISTRIBUTED AMONG AT LEAST THREE OF THE DEPARTMENTS REPRESENTED IN THE PROGRAM--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, LAW, POLITICAL SCIENCE, RUSSIAN AND SOCIOLOGY--IN ADDITION TO THE STUDENTS OWN MAJOR DEPARTMENT. FOR COURSES, SEE ABOVE. IF THE STUDENTS MAJOR DEPARTMENT IS ONE MENTIONED ABOVE, HE MAY COUNT UP TO ONE UNIT FROM WITHIN HIS MAJOR DEPARTMENT AS PART OF HIS SIX UNITS. 3--A A SPECIAL ESSAY BASED LARGELY ON RUSSIAN SOURCES AND TO BE, AT THE MINIMUM, OF THE STANDARD NORMALLY REQUIRED IN A MASTERS THESIS. THE STUDENT MAY SUBMIT, IN FULFILLMENT OF THIS REQUIREMENT, A COPY OF HIS MASTERS THESIS OR DOCTORAL DISSERTATION.

THE ADVISER FOR THE GRADUATE MINORS AND THE CERTIFICATE IS PROFESSOR EDWARD G LEWIS, ACTING DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES, 1207 W OREGON.

STUDENTS IN OTHER COLLEGES

STUDENTS IN OTHER COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO DESIRE A KNOWLEDGE OF THE RUSSIAN AREA ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH PROGRAMS MAY IN SOME CASES BE ADOPTED AS A SPECIAL MINOR.

BELOW ARE LISTED COURSES APPROVED FOR THE RUSSIAN LANGUAGE AND AREA STUDIES PROGRAMS WHICH ARE BEING OFFERED THIS TERM. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.

GEOG 495 HIST 328 RUSS 322, 405, 414

SAFETY EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR GRADUATES

S ED 402 PROBLEMS IN SAFETY EDUCATION.
1 UNIT
01101 LECT-DISC 10 MTUWTH 211 H G FLORIO

SECONDARY AND CONTINUING EDUCATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR ADVANCED UNDERGRADUATES

SE ED 240 PRINCIPLES OF SECONDARY EDUCATION.
PREREQUISITE--SE. ED. 101 AND PSYCH. 100.
2 HOURS
01102 LECT-DISC 8 TUWTHF 126 COM W COX

SE ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

01103	CONF		ARR					STAFF

COURSES FOR GRADUATES

SE ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT

01104	LECT-DISC	A1	8	TUWTHF	432	ARMORY		WALKER
01105	LECT-DISC	A2	8	TUWTHF	120	COM W		ERICKSON
01106	LECT-DISC	B	9	TUWTHF	120	COM W		DEBOER

SE ED 448 CONTINUING EDUCATION.
1/2 OR 1 UNIT
MEETS FIRST FOUR WEEKS ONLY

01107	LECT-DISC		1-3	TUWTHF	1	G H		HEMP

SE ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

01108	CONF		ARR					GRADUATE STAFF

SE ED 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.
1 UNIT
SECTION A IS FOR ENGLISH.
SECTION C IS FOR MATH
SECTION D IS FOR SCIENCE.
SECTION E IS FOR SOCIAL STUDIES.
*SECTION E TO MEET LAST FOUR WEEKS ONLY.

01109	LECT-DISC	A	10	TUWTHF	170	COM W		DEBOER
01244	LECT-DISC	C	8	TUWTHF	30	COM W		HOLTAN
01245	LECT-DISC	D	8	TUWTHF	170	COM W		WELLER
01110	LECT-DISC	*E	1-3	TUWTHF	170	COM W		METCALF

SE ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1 TO 2 UNITS
*SECTION A IS FOR STUDENTS ENROLLED IN NATIONAL SCIENCE FOUNDATION ECONOMICS INSTITUTE. MEETS JUNE 21 THRU JULY 30.
*SECTION B IS RESTRICTED TO NATIONAL SCIENCE FOUNDATION MATHEMATICS PROGRAM. JULY 5 THRU AUGUST 13.

01111	LECT-DISC	A	8-1030	MTUWTHF	245	COM W		PADEN
01112	LECT-DISC	B	830-1130	MTUWTHF		ARR		STAFF
		B	130-4	MTUWTHF		ARR		STAFF

SE ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

01113	CONF		ARR					GRADUATE STAFF

SE ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

01114	CONF		ARR					GRADUATE STAFF

SOCIAL SCIENCES

THE DIVISION OF SOCIAL SCIENCES SPONSORS THE FOLLOWING PROGRAMS--A-AN UNDERGRADUATE MAJOR AND MINOR IN LATIN AMERICAN STUDIES, B-A GRADUATE MINOR IN LATIN-AMERICAN STUDIES, C-AN UNDERGRADUATE MAJOR AND MINOR IN RUSSIAN AREA STUDIES, D-A GRADUATE MINOR IN RUSSIAN AREA STUDIES, E-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE SOCIAL SCIENCES, F-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE TEACHING OF SOCIAL STUDIES. G-A GRADUATE MAJOR AND MINOR AND UNDERGRADUATE MINOR IN LINGUISTICS.

THE STUDY OF INTERNATIONAL AFFAIRS.--THE DIVISION OF SOCIAL SCIENCES CALLS TO THE ATTENTION OF STUDENTS THE OFFERINGS IN THE GENERAL FIELD OF INTERNATIONAL AFFAIRS FOUND AT THE UNIVERSITY OF ILLINOIS. THE DIVISION RECOMMENDS THAT THE STUDENT INTERESTED IN INTERNATIONAL AFFAIRS CONSULT WITH THE ADVISER IN HIS MAJOR DEPARTMENT CONCERNING THE POSSIBILITY OF TAKING COURSES IN THIS AREA, EITHER AS PART OF A MINOR OR SPLIT MINOR OR AS ELECTIVES.

ENTRANCE EXAMINATIONS FOR THE FOREIGN SERVICE OF THE UNITED STATES.-STUDENTS INTERESTED IN PREPARING FOR THESE EXAMINATIONS ARE URGED TO CONSULT WITH THE GOVERNMENT PLACEMENT CONSULTANT OF THE UNIVERSITY PLACEMENT SYSTEM, WHO MAY BE SEEN AT THE INSTITUTE OF GOVERNMENT AND PUBLIC AFFAIRS, 1201 WEST NEVADA STREET.

SOCIOLOGY

DEPARTMENT OFFICE 342 L H

MAJOR--TWENTY HOURS FROM ANY COURSES IN SOCIOLOGY, EXCLUDING SOCIOL. 100, 104, AND 105. SOCIOLOGY MAJORS ARE STRONGLY ADVISED TO TAKE AT LEAST ONE COURSE IN EACH OF THE FOLLOWING FIELDS--GENERAL SOCIOLOGICAL THEORY--SOC. 300--SOCIETY AND THE INDIVIDUAL--SOC. 212 AND 320--AND SOCIOLOGICAL RESEARCH METHODS--SOC. 385 AND 386. SOC. 185, OR AN EQUIVALENT, IS REQUIRED FOR SOCIOLOGY MAJORS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY AND SOCIAL WORK. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.

DEPARTMENTAL DISTINCTION--IN ORDER TO BE AWARDED DISTINCTION IN SOCIOLOGY AT GRADUATION, THE STUDENT MUST 1 -HAVE AT LEAST A 4.0 ALL UNIVERSITY GRADE POINT AVERAGE, 2 - MEET THE GENERAL REQUIREMENTS FOR A MAJOR IN SOCIOLOGY, AND, 3- IN ADDITON TO THE WORK DONE FOR THE MAJOR, EARN FOUR SEMESTER HOURS OF CREDIT BY ENROLLING IN ONE OR BOTH OF THE HONORS COURSES--SOC. 290-291.

COURSES FOR UNDERGRADUATES

SOC 185 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS.
SAME AS ANTH. AND GEOG. 185.
PREREQUISITE--SOC. 100 OR CONSENT OF INSTRUCTOR OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS

01115	LECT-DISC	A	9-11	TU TH	314 L H	SIMMONS
01116	LAB	B	ARR			

COURSES FOR ADVANCED UNDERGRADUATES

SOC 277 RURAL SOCIAL CHANGE.
SAME AS R. SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

01117	LECT-DISC	B	9	MTUWTHF	316S M H	LINDSTROM
		B	7	TU	316S M H	

SOC 290 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

01118	CONF		ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOC 323 THE SMALL SOCIAL GROUP.
PREREQUISITE--SOC. 100, OR R. SOC. 117.
3 HOURS, OR 1/2 OR 1 UNIT

01119	LECT-DISC	A	11	MTUWTHFS	314 L H	MCCALL

COURSES FOR GRADUATES

SOC 435 FIELD INSTRUCTION AND RESEARCH IN PENAL SOCIOLOGY.
APPLICATION FOR ADMISSION TO THIS COURSE MUST BE MADE IN APRIL PRIOR TO THE SUMMER SESSION IN WHICH ENROLLMENT IS DESIRED.
PREREQUISITE--SOC. 324 AND 331 OR EQUIVALENT, CONSENT OF INSTRUCTOR, AND PASSING ROUTINE EMPLOYMENT CLEARANCE PROCEDURES BY THE PRISON.
1 UNIT

01120	CONF	A	ARR			GLASER

SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS R. SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS--JUNE 16 TO JULY 11.

01121	LECT-DISC	A	1-3	MTUWTH	316S M H	LINDSTROM

SOC 480 SOCIOLOGICAL THEORY AND METHOD.
1 UNIT

01122	LECT-DISC	A	9-11	TU TH	348 L H	GLASER

SOC 482 RECENT DEVELOPMENTS IN SOCIOLOGY.
*STUDENTS MAY ACCUMULATE TWO UNITS.
1 UNIT
TOPIC--SEMINAR ON DEVIANT BEHAVIOR.

01123	LECT-DISC	A	1-3	TU TH	1204 W OREGON	SIMMONS

SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS R. SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

01124	CONF	A	ARR			STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
1/2 TO 2 UNITS

01125	CONF	A	ARR			STAFF

SOC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS.

01126	CONF	A	ARR			STAFF
01127	CONF	B	ARR			STAFF

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN SPANISH, EXCLUDING SPANISH 101,102,103, 104, AND 115, AND INCLUDING AT LEAST EIGHT HOURS OF SPANISH FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. EITHER LING. 300, INTRODUCTION TO LINGUISTICS, OR LING. 302, COMPARATIVE LINGUISTICS, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH. EITHER SOC.SCI. 101 OR 102, LATIN-AMERICAN CIVILIZATION, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH AND IS REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN, EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LATIN-AMERICAN STUDIES, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, AND RUSSIAN.

COURSES FOR UNDERGRADUATES

SPAN 101 ELEMENTARY SPANISH, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR SPAN. 101 WITHOUT SPAN. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL.

01128	LECT-DISC	E	1-3	MTUWTH	143	ADMIN	
01129	LECT-DISC	G	3-5	MTUWTH	217	G H	

SPAN 102 ELEMENTARY SPANISH, II.
PREREQUISITE--SPAN. 101 OR ONE YEAR OF HIGH SCHOOL SPANISH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL

01130	LECT-DISC		10-12	MTUWTH	176	L H

SPAN 103 INTERMEDIATE SPANISH, I.
PREREQUISITE--SPAN. 102 OR TWO YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

01131	LECT-DISC		8-10	MTUWTH	217	G H

SPAN 104 INTERMEDIATE SPANISH, II.
PREREQUISITE--SPAN. 103 OR THREE YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

01132	LECT-DISC		1-3	MTUWTH	217	G H

COURSES FOR ADVANCED UNDERGRADUATES

SPAN 211 INTERMEDIATE COMPOSITION AND CONVERSATION, I.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
3 HOURS

01133	LECT-DISC		11	MTUWTHFS	108	L H

SPAN 212 INTERMEDIATE COMPOSITION AND CONVERSATION, II.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 211 OR EQUIVALENT.
3 HOURS

01134	LECT-DISC		11	MTUWTHFS	4	G H	FLORES

SPAN 213 ADVANCED COMPOSITION AND CONVERSATION, I.
PREREQUISITE--SPAN. 212 OR EQUIVALENT.
3 HOURS
01135 LECT-DISC 11 MTUWTHFS 4 G H FLORES

SPAN 214 ADVANCED COMPOSITION AND CONVERSATION, II.
PREREQUISITE--SPAN. 213 OR EQUIVALENT.
3 HOURS
01136 LECT-DISC 11 MTUWTHFS 4 G H FLORES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED COURSES IN SPANISH UNLESS OTHERWISE NOTED HAVE THE FOLLOWING PREREQUISITE--SPAN. 222 OR EQUIVALENT.

SPAN 307 SPANISH AMERICAN LITERATURE TO 1888.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT
01137 LECT-DISC 9 MTUWTHFS 4 G H MEINHARDT

SPAN 311 DON QUIXOTE AND THE PROSE OF THE GOLDEN AGE.
PREREQUISITE--SPAN. 305, 306, 307, OR 308, OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT
01138 LECT-DISC 1 MTUWTH 4 G H LEAL

SPAN 351 PHONETICS.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT
01139 LECT-DISC 3 MTUWTH 4 G H ALLEN

SPAN 352 SYNTAX.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT.
*SECTION *C2 IS RESERVED FOR GRADUATE STUDENTS.
01140 LECT-DISC 10 MTUWTH 217 G H FLORES

COURSES FOR GRADUATES

SPAN 411 SPANISH LITERATURE IN THE MIDDLE AGES.
1 UNIT
01141 LECT-DISC 2 MTUWTH 4 G H ALLEN

SPAN 434 SPANISH-AMERICAN NOVEL--SOUTH AMERICA.
PREREQUISITE--SPAN. 307 AND 308 OR EQUIVALENT.
1 UNIT
01142 LECT-DISC 11 MTUWTH 217 G H LEAL

SPAN 491 SPECIAL TOPICS IN SPANISH.
1/2 OR 1 UNIT
01143 CONF ARR ALLEN, FLORES
LEAL

SPAN 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
01144 CONF ARR ALLEN, LEAL

SPECIAL EDUCATION

DEPARTMENT OFFICE 220 EDUC

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SP ED 316 THE GIFTED CHILD IN SCHOOL AND SOCIETY.
PREREQUISITE--ED. PSY. 211 OR EL. ED. 236.
3 HOURS, OR 1/2 TO 1 UNIT
*WILL MEET FIRST FOUR WEEKS ONLY.

01145	LECT-DISC		3-5	TUWTHF	192	EDUC	GALLAGHER

SP ED 318 WORKSHOP AND LABORATORY IN EDUCATION OF EXCEPTIONAL CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
4 TO 8 HOURS, OR 1 TO 2 UNITS
*SECTION B IS FOR LEARNING DISABILITIES AND WILL BE OFFERED FOR 8 WEEKS
*SECTION C IS GIFTED INSTITUTE AND WILL BE OFFERED FIRST EIGHT WEEKS.
*SECTION X IS SPECIAL WORKSHOP FOR QPE PSYCHOLOGISTS AND WILL BE OFFERED FIRST FOUR WEEKS ONLY.

01146	LECT-DISC	*B	8-3	TUWTHF	ARR		KASS
01147	LECT-DISC	*C	8-3	TUWTHF	ARR		RUGGE
01148	LECT-DISC	*X	8-3	TUWTHF	ARR		KIRK

SP ED 321 EDUCATION OF DISTURBED AND CONDUCT-PROBLEM CHILDREN.
PREREQUISITE--SP. ED. 117 OR EQUIVALENT-EL. ED. 236, OR EQUIVALENT.
3 HOURS, OR 1/2 TO 1 UNIT

01149	LECT-DISC		8	TUWTHF	1	EDUC	HURLEY

SP ED 322 PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED, I.
PREREQUISITE--EL. ED. 231, SENIOR STANDING.
3 HOURS, OR 1/2 UNIT

01150	LECT-DISC		3	TUWTHF	162	EDUC	NESSLER

COURSES FOR GRADUATES

SP ED 417 PSYCHO-EDUCATIONAL PROBLEMS OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SIXTEEN HOURS OF PSYCHOLOGY AND/OR EDUCATION, OR CONSENT OF INSTRUCTOR.
1 UNIT

01151	LECT-DISC		11	TUWTHF	25	EDUC	R HENDERSON

SP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

01152	CONF		ARR		210	EDUC	GRADUATE STAFF

SP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

01153	CONF		ARR		220	EDUC	GRADUATE STAFF

SP ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

01154	CONF		ARR		210	EDUC	GRADUATE STAFF

SPEECH AND THEATRE

DEPARTMENT OFFICE 133 L H

MAJOR--TWENTY HOURS IN SPEECH IN ADDITION TO SPCH. 101, 105, AND 141. AT LEAST FIVE OF THE TWENTY HOURS MUST BE IN COURSES NUMBERED 300 OR HIGHER, SPCH. 301 MUST BE INCLUDED. IN DECLARING A MAJOR IN SPEECH THE STUDENT MAY CHOOSE ONE OF THESE AREAS FOR EMPHASIS--GENERAL SPEECH, PUBLIC ADDRESS, INTERPRETATION, THEATRE, SPEECH SCIENCE AND PHONETICS, SPEECH CORRECTION AND AUDIOLOGY. THE STUDENT SHOULD REPORT TO 133 LINCOLN HALL TO BE ASSIGNED AN AREA ADVISER WITH WHOM HE MAY CONFER CONCERNING REQUIRED AND RECOMMENDED COURSES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED WITH THE APPROVAL OF THE STUDENTS MAJOR ADVISER AND HIS DEPARTMENT HEAD. IF TWO MINOR SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE INCLUDED IN EACH. A MINOR PROGRAM IN ENGLISH MAY NOT INCLUDE MORE THAN THREE HOURS IN LITERATURE COURSES OPEN TO FRESHMEN AND SOPHOMORES AND MAY NOT INCLUDE RHET. 101, 102, 151, 271, AND 272. NO LANGUAGE COURSES MAY SATISFY THE MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THE LANGUAGE DEPARTMENTS.

TWO TEACHER-TRAINING CURRICULA ARE OFFERED IN SPEECH. SEE THE CURRICULUM PREPARATORY TO SPEECH CORRECTION WORK AND THE CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH.

COURSES FOR UNDERGRADUATES

SPCH 101 PRINCIPLES OF EFFECTIVE SPEAKING.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

01155	LECT-DISC	A	8	MTUWTH	145	L H	INCE
		A	8-10	F	145	L H	
01156	LECT-DISC	B1	9	MTUWTH	140	L H	BROOKS
		B1	9-11	F	140	L H	
01157	LECT-DISC	B2	9	MTUWTH	132	L H	CRONKHITE
		B2	9-11	F	132	L H	
01158	LECT-DISC	C	10	TUWTHF	262	ARMORY	WENZEL
		C	10-12	M	262	ARMORY	
01159	LECT-DISC	E	1-3	M W F	262	ARMORY	MURPHY

SPCH 141 ORAL INTERPRETATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS
*ONE HOUR TO BE ARRANGED.

01160	LECT-DISC	B	*9	MTUWTHF	255	ARMORY	

COURSES FOR ADVANCED UNDERGRADUATES

SPCH 208 CLASSROOM PROBLEMS IN SPEECH CORRECTION.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

01161	LECT-DISC	C	10-12	TUWTH	145	L H	GOOD

SPCH 291 HONORS COURSE.
PREREQUISITE--SENIOR STANDING, A GRADE-POINT AVERAGE OF 4.0 OR CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

01162	CONF		ARR				STAFF

SPCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF SPEECH, GRADE-POINT AVERAGE OF 3.75, CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS
01163 CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPCH 311 BRITISH PUBLIC ADDRESS.
3 HOURS, OR 1/2 OR 1 UNIT
01164 LECT-DISC C 10 TUWTHF 116 L H MURPHY
C 9-11 M 116 L H

SPCH 345 CONTEMPORARY APPROACHES TO ORAL INTERPRETATION.
PREREQUISITE--SPCH. 141 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED
01165 LECT-DISC D *11 MTUWTHF 255 ARMORY SLOAN

SPCH 352 INTRODUCTION TO MODERN THEATRE ART.
3 HOURS, OR 1/2 OR 1 UNIT
01166 LECT-DISC 8-10 M W F 262 ARMORY HEWITT

SPCH 353 CREATIVE DRAMATICS FOR CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
01167 LECT-DISC E 1-3 M W F 160 ARMORY TYMCHYSHYN

SPCH 355 ADVANCED PLAY DIRECTING.
PREREQUISITE--SPCH. 255 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT
01168 LECT-DISC C 10-12 M W F 160 ARMORY ARBENZ

SPCH 376 SPEECH SCIENCE, II.
SAME AS LING. 376.
PREREQUISITE--SPCH. 375 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
*ONE HOUR TO BE ARRANGED
01169 LECT-DISC B *9 MTUWTHF 104 SP CLINIC ZEMLIN

SPCH 383 DEVELOPMENT OF SPOKEN LANGUAGE.
PREREQUISITE--SENIOR STANDING AND CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED
01170 LECT-DISC *1 MTUWTHF 106 SP CLINIC NASCA

COURSES FOR GRADUATES

SPCH 403 SEMINAR FOR TEACHERS OF SPEECH.
1 UNIT
01171 LECT-DISC ARR BURNS

SPCH 411 THE GREEK TRADITION IN RHETORIC AND ORATORY.
1 UNIT
01172 LECT-DISC ARR BATEMAN

SPCH 430 CONTEMPORARY THEORIES OF CRAL COMMUNICATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
01173 LECT-DISC ARR SCHEIDEL

SPCH 452 PROBLEMS IN PLAY PRODUCTION IN THE EDUCATIONAL THEATRE.
1 UNIT
01174 LECT-DISC 10-12 TU TH 160 ARMORY BEHRINGER

SPCH 461 ADVANCED THEATRE TECHNIQUES.
PREREQUISITE--AT LEAST 1 SEMESTER OF GRADUATE STUDY IN THE AREA OF THEATRE, CONSENT OF HEAD OF DEPARTMENT AND OF INSTRUCTOR.
1/2 OR 1 UNIT
01175 LECT-DISC 8-10 TU TH 262 ARMORY HERSTAND

SPCH 483 PSYCHOLOGY OF SPEECH AND HEARING DISORDERS, I.
SAME AS PSYCH. 483.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
01176 LECT-DISC ARR 104 SP CLINIC ONEILL

SPCH 486 ADVANCED CLINICAL TECHNIQUES IN SPEECH AND HEARING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 4 UNITS
01177 LECT-DISC ARR 104 SP CLINIC NASCA AND STAR

SPCH 488 DIAGNOSIS OF SPEECH DISORDERS.
1 UNIT
01178 LECT-DISC ARR 106 SP CLINIC

SPCH 491 SEMINAR IN HEARING DISORDERS.
PREREQUISITE--SPCH. 391.
1 UNIT
01179 LECT-DISC ARR 104 SP CLINIC STARK

SPCH 495 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF THE HEAD OF THE DEPARTMENT.
*OPEN TO MASTERS CANDIDATES FOR ONE UNIT, TO DOCTORS CANDIDATES FOR ONE OR TWO UNITS.
*1 OR 2 UNITS
01180 CONF ARR STAFF

SPCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
01181 CONF ARR STAFF

THEORETICAL AND APPLIED MECHANICS

DEPARTMENT OFFICE 212 T L

COURSES FOR UNDERGRADUATES

T A M 150 ANALYTICAL MECHANICS--STATICS.
PREREQUISITE--PHYCS. 101 OR 106. REGISTRATION IN MATH. 142 OR 143.
2 HOURS
01182 LECT-DISC P 8 MTU THF 313 T L

COURSES FOR ADVANCED UNDERGRADUATES

T A M 211 ANALYTICAL MECHANICS--DYNAMICS.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR 143.
3 HOURS
01183 LECT-DISC P 9 MTUWTHFS 313 T L

T A M 221 ELEMENTARY MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR 143.
3 HOURS

01184	LECT-DISC	P	10	MTUWTHFS	310	T L

T A M 223 MECHANICAL BEHAVIOR OF SOLIDS.
PREREQUISITE--REGISTRATION IN T.A.M. 221.
1 HOUR

01185	LAB	P	3-5	M W	225	T L

T A M 235 FLUID MECHANICS.
PREREQUISITE--T.A.M. 211 OR 212.
4 HOURS

01186	LECT-DISC	E	9	MTUWTHFS	310	T L
01186	LAB	E	3-5	TU TH	126	T L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

T A M 311 MECHANICAL VIBRATIONS.
PREREQUISITE--T A M 154 OR 156 OR 211 OR 212 AND 221.
3 HOURS, OR 1/2 OR 1 UNIT

01187	LECT-DISC	P	11	MTUWTHFS	306B	T L

T A M 321 ADVANCED MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T A M 221 AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT

01188	LECT-DISC	P	8	MTUWTHFS	306B	T L

T A M 326 EXPERIMENTAL STRESS ANALYSIS.
PREREQUISITE--T A M 150, 211, 212, 221, AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT

01189	LAB-DISC	Z	10-12	MTU THF	302C	T L

T A M 346 DIMENSIONAL ANALYSIS AND THEORY OF MODELS.
3 HOURS, OR 1/2 OR 1 UNIT

01190	LECT-DISC	Z	9	MTUWTHFS	306B	T L

COURSES FOR GRADUATES

T A M 441 APPLIED ANALYSIS IN ENGINEERING, I.
PREREQUISITE--MATH. 143.
1 UNIT

01191	LECT-DISC		10	MTUWTHFS	306B	T L

T A M 493 ADVANCED INDEPENDENT STUDY--SPECIAL PROBLEMS.
1/2 TO 2 UNITS

01192	CONF	X	ARR	STAFF

T A M 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

01193	CONF	A	ARR	KESLER
01194	CONF	B	ARR	SIDEBOTTOM
01195	CONF	C	ARR	SMITH
01196	CONF	X	ARR	STAFF

URBAN PLANNING

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

U P 488 URBAN PLANNING RESEARCH.
PREREQUISITE--U.P. 171 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
01197 CONF ARR STAFF

U P 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN URBAN PLANNING.
1/2 TO 2 UNITS
01198 CONF ARR STAFF

VETERINARY MEDICAL SCIENCE

DEPARTMENT OFFICE 131 V M

COURSES FOR GRADUATES

V M S 459 ADVANCED CORRELATIVE PATHOLOGY.
PREREQUISITE--V.M.S. 335, 308, 445, 450, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
01199 LAB-DISC A ARR SIMON

V M S 492 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT
01200 LAB A ARR STAFF

V M S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
01201 LAB A ARR STAFF

VETERINARY MEDICINE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

V M 392 SPECIAL PROBLEMS.
PREREQUISITE--PROFESSIONAL STANDING IN VETERINARY CURRICULUM AND GRADE POINT AVERAGE OF 3.5.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 1 UNIT
*3 HOURS, OR 1/2 UNIT
01202 LAB A ARR STAFF

VOCATIONAL AND TECHNICAL EDUCATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR UNDERGRADUATES

VOTEC 189 INDUSTRIAL PRACTICES.
PREREQUISITE--SOPHOMORE STANDING, ENROLLMENT IN INDUSTRIAL EDUCATION OPTIONS II AND III.
*STUDENTS MAY ACCUMULATE SEVENTEEN HOURS.
*2 OR 3 HOURS

01203	PRACT		ARR				STERN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

VOTEC 381 PRINCIPLES OF VOCATIONAL EDUCATION.
3 HOURS, OR 1/2 OR 1 UNIT

01204	LECT-DISC		12	MTUWTHFS	33	EDUC	TOMLINSON

VOTEC 383 DEVELOPMENT, ORGANIZATION, AND PRINCIPLES OF INDUSTRIAL EDUCATION.
3 HOURS, OR 1/2 OR 1 UNIT

01205	LECT-DISC		11	MTUWTHFS	42	EDUC	LUX

VOTEC 384 THE GENERAL SHOP PROGRAM.
PREREQUISITE--SIXTEEN HOURS IN APPROPRIATE VOCATIONAL AND TECHNICAL EDUCATION COURSES.
4 HOURS, OR 1 UNIT

01206	LECT-DISC		9	TUWTHF	38	EDUC	STERN
01206	LAB		10-12	TUWTHF	38	EDUC	

COURSES FOR GRADUATES

VOTEC 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

01207	CONF		ARR				GRADUATE STAFF

VOTEC 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF VOACTIONAL AND TECHNICAL EDUCATION.
1 UNIT
*SECTION A IS FOR BUSINESS EDUCATION AND MEETS EIGHT WEEKS
*SECTION B IS FOR HOME ECON EDUCATION AND MEETS FIRST FOUR WEEKS

01208	LECT-DISC	*A	11	TUWTHF	8	D K H	NELSON
01209	LECT-DISC	*B	1	TUWTHF	25	EDUC	SPITZE
01209	LAB	*B	3	TUWTHF	25	EDUC	SPITZE

VOTEC 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1/2 OR 1 TO 2 UNITS
*SECTION A IS FOR AGRICULTURAL EDUCATION AND MEETS FIRST FOUR WEEKS. DESIGNED TO GIVE SPECIAL ATTENTION TO CURRICULAR PROBLEMS RESULTING FROM BROADENED OBJECTIVES OF AGRICULTURAL EDUCATION AS PROVIDED IN THE VOCATIONAL EDUCATION ACT OF 1963.
*SECTION B IS FOR BUSINESS EDUCATION AND MEETS EIGHT WEEKS. STUDY OF THE BASIC CONCEPTS OF OFFICE AUTOMATION, ITS NATURE, FUNCTIONS, PROBLEMS AND TRENDS, WITH PARTICULAR REFERENCE TO CURRICULUM DEVELOPMENT. MODERN OFFICE EQUIPMENT AVAILABLE FOR STUDY AND PRACTICE. ENROLLMENT LIMITED. CONSENT OF INSTRUCTOR REQUIRED.
*SECTION C IS FOR COOPERATIVE EXTENSION AND MEETS FIRST FOUR WEEKS. STUDY OF COOPERATIVE EXTENSION EDUCATION, ITS PURPOSES, METHODS, AND CHARACTERISTICS AS DISTINGUISHED FROM FORMAL EDUCATION. THE MAJOR EMPHASIS ON THE UNDERSTANDING OF TEACHING-LEARNING PROCESS AS IT APPLIES TO ADULT LEARNING. THE PSYCHOLOGICAL PRINCIPLES OF ADULT MOTIVATION AND GROUP DYNAMICS ARE DEVELOPED AND EMPHASIZED.

VOTEC459 CONTINUED
*SECTION D IS FOR HOME ECONOMICS EDUCATION AND MEETS FIRST FOUR WEEKS. WORKSHOP IN FAMILY RELATIONS FOR THE PURPOSE OF DEVELOPING CURRICULAR MATERIALS USEFUL TO SECONDARY SCHOOL TEACHERS OF HOME ECONOMICS.
*SECTION E IS FOR HOME ECONOMICS EDUCATION AND MEETS SECOND FOUR WEEKS. HOME MANAGEMENT WORKSHOP FOR SECONDARY SCHOOL TEACHERS OF HOME ECONOMICS.
*SECTION F IS FOR INDUSTRIAL EDUCATION AND MEETS FIRST FOUR WEEKS. WORKSHOP IN INDUSTRIAL DESIGN FOR TEACHERS OF INDUSTRIAL ARTS. INVOLVES CRITICAL ANALYSIS OF DESIGN PROBLEMS, CONSTRUCTION OF MODELS, AND EVALUATION OF SOLUTIONS.
*SECTION G IS FOR INDUSTRIAL EDUCATION AND MEETS SECOND FOUR WEEKS. WORKSHOP IN DRAFTING AND ENGINEERING GRAPHICS FOR INDUSTRIAL EDUCATION TEACHERS. THEORY AND LABORATORY SESSIONS.
SECTION H IS FOR HOME ECONOMICS EDUCATION AND MEETS LAST FOUR WEEKS. WORKSHOP IN EMPLOYMENT EDUCATION IN HOME ECONOMICS FOR PURPOSE OF HELPING TEACHERS MEET THE CHALLENGES OF THE DEVELOPING EMPHASIS ON EDUCATION FOR WAGE EARNING IN HOME ECONOMICS. 1 UNIT.

01210	LECT-DISC	*A	3-5	TUWTHF	33	EDUC	PHIPPS, HEMP, FULLER, WARMBARD
01212	LECT-DISC	*B	8-10	TUWTHF	3	D K H	MELSON
01213	LECT-DISC	*C	8-10	TUWTHF	33	EDUC	E ANDERSON
01214	LECT-DISC	*D	8-11	TUWTHF	25	EDUC	LEMMON
01216	LECT-DISC	*E	1-4	TUWTHF	25	EDUC	MATHER, GUTHRIE
01215	LECT-DISC	*F	1-5	TUWTHF	42	EDUC	TINKHAM
01215	LAB	*F	1-5	TUWTHF	48A	EDUC	
01217	LECT-DISC	*G	10-12	MTUWTHF	306	T B	BOKENKEMP
01217	LAB	*G	1-4	TU TH	306	T B	BOKENKEMP
01211	LECT-DISC	*H	8-11	TUWTHF	25	EDUC	SIMPSON

VOTEC 472 COURSE PLANNING AND TEACHING PROCEDURES IN VOCATIONAL AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT

01218	LECT-DISC	1-3	TUWTHF	33	EDUC	FULLER

VOTEC 474 SUPERVISED FARMING IN VOCATIONAL AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT

01219	LECT-DISC	10-12	TUWTHF	33	EDUC	WARMBROD

VOTEC 475 ORGANIZING AND TEACHING FARM MECHANICS.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT

01220	LECT-DISC	8-10	TUWTHF	28	EDUC	PHIPPS

VOTEC 481 HISTORY AND BASIC CONCEPTS OF VOCATIONAL EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

01221	LECT-DISC	1-3	TUWTHF	28	EDUC	CAMPBELL

VOTEC 488 CURRICULUM PROBLEMS AND TRENDS IN INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT

01222	LECT-DISC	8	TUWTHF	42	EDUC	LUX

VOTEC 489 ADMINISTRATION AND SUPERVISION OF INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT
MEETS FIRST FOUR WEEKS.

01223	LECT-DISC	1-3	TUWTHF	126	COM W	KARNES

VOTEC 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

01224	CONF	ARR				GRADUATE STAFF

VOTEC 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS
01225 CONF ARR GRADUATE STAFF

VOTEC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS
01226 CONF ARR GRADUATE STAFF

ZOOLOGY

DEPARTMENT OFFICE 345 N H

MAJOR--TWENTY HOURS IN ZOOLOGY, EXCLUDING ZOOL. 101, 104, 106 107, BIOL. 151, D G S 131 AND 132, AND BIOL. 101 AND 102 AT CHICAGO UNDERGRADUATE DIVISION. AT LEAST ONE COURSE MUST BE TAKEN IN EACH OF THE FOLLOWING AREA-GROUPS OF COURSES--
GENETICS AND DEVELOPMENT--ZOOL. 210, 333, 367
CELLULAR AND PHYSIOLOGICAL ZOOLOGY--ZOOL. 301, 302, 312, 334
ECOLOGY AND BEHAVIOR--ZOOL. 342, 343, 345, 346, 369
MORPHOLOGY AND SYSTEMATICS--ZOOL. 132, 142, 304, 305, 318, 320, 321, 324, 332, 335, 336, 337, 338, 340, 344
BIOL. 203, 204, 251, 351, AND ALL 200-, 300-, AND 400-LEVEL ZOOLOGY COURSES, EVEN IF NOT INCLUDED IN THE PRECEDING AREA LISTS, AUTOMATICALLY COUNT TOWARD THE TWENTY HOURS. ALSO REQUIRED ARE ONE YEAR OF PHYSICS, AT LEAST 3 SEMESTERS OF CHEMISTRY INCLUDING ORGANIC, AND MATHEMATICS THROUGH ANALYTIC GEOMETRY WITH CALCULUS HIGHLY RECOMMENDED. ALSO HIGHLY RECOMMENDED IS ONE COURSE IN GENERAL BOTANY, MICROBIOLOGY, OR GEOLOGY. THESE REQUIREMENTS ARE EFFECTIVE FOR ALL UNDERGRADUATE STUDENTS ENTERING THE UNIVERSITY AFTER SEPTEMBER 1963.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANIMAL SCIENCE, TO BE CHOSEN FROM COURSES 100, 110, 230, 305 OR 330, ANTHROPOLOGY, BOTANY, CHEMISTRY, EDUCATION, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHYSICS, PHYSIOLOGY, AND PSYCHOLOGY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 131 AND 132 OR BIOL. 151 AND 251 MAY BE SUBSTITUTED FOR ZOOL. 101 OR 104 WHEREVER EITHER OF THE LATTER CONSTITUTES A PREREQUISITE.

OOL 101 GENERAL ZOOLOGY.
FIELD TRIP.
*CREDIT IS NOT GIVEN IN ZOOL. 101 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

01227	LECT	8	MTUWTH	435	N H B	LONG, HIKIDA,
01227	LAB-DISC	9-12	MTUWTH	313	N H B	UNDERHILL, WHITE

OOL 104 ELEMENTARY ZOOLOGY.
*CREDIT IS NOT GIVEN IN ZOOL. 104 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

01228	LECT	8	MTUWTH	435	N H B	LONG, HIKIDA,
01228	LAB-DISC	9-12	MTUWTH	315	N H B	UNDERHILL, WHITE

ZOOL 132 COMPARATIVE VERTEBRATE ANATOMY.
PREREQUISITE--ZOOL. 101 OR ONE YEAR OF GENERAL BIOLOGY--SUCH AS BIOLOGICAL SCIENCE OR THE BOTANY-ZOOLOGY SEQUENCE, A GRADE OF C IN ZOOL. 101 IS REQUIRED OF FRESHMEN.
*CREDIT IS NOT GIVEN FOR BOTH ZOOL. 132 AND 142.
*5 HOURS

01229	LECT		8	MTUWTH	247	N H B		SMITH, WALLACE
01229	LAB-DISC		9-12	MTUWTH	330	N H B		

ZOOL 210 GENETICS.
SAME AS BOT. 210.
PREREQUISITE--BOT. 100 AND ZOOL. 101 OR CONSENT OF INSTRUCTOR.
4 HOURS

01230	LECT		2	MTUWTHF	140	BUR HALL		BADER, TENCZAR
01230	LAB-DISC		3	MTUWTHF	314	N H E		

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ZOOL 302 EXPERIMENTAL ANIMAL PHYSIOLOGY.
SAME AS PHYSL. 302.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS AND PHYSICS, CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

01231	LECT		8	MTUWTHF	140	BUR HALL		ANDERSON
01232	LAB	1	9-12	MTUW	523	BUR HALL		
01233	LAB	2	2-5	MTUW	523	BUR HALL		

ZOOL 303 INDIVIDUAL TOPICS.
PREREQUISITE--TWO YEARS OF ZOOLOGY, SENIOR STANDING, APPROVAL OF DEPARTMENT.
2 TO 5 HOURS, OR 1/2 OR 1 UNIT

01234	CONF		ARR					STAFF

ZOOL 306 BIOLOGY FOR TEACHERS.
SAME AS BOT. 306.
PREREQUISITE--BOT. 100, ZOOL. 101 OR 104, OR A ONE-YEAR COURSE IN GENERAL BIOLOGY, JUNIOR STANDING, EXPECTATION OF TEACHING.
FIELD TRIPS ADJUSTED TO PRACTICE TEACHING. 2 TO 4 HOUR TRIPS ON SATURDAY.
3 HOURS, OR 1/2 UNIT
*4 ADDITIONAL CLASS MEETINGS TO BE ARRANGED.

01235	LAB-DISC		10-12	MTUWTHF	153	N H B		

ZOOL 333 VERTEBRATE EMBRYOLOGY.
PREREQUISITE--ZOOL. 132.
5 HOURS, OR 1 UNIT

01236	LECT		8	MTUWTH	434	N H B		ADAMSTONE,
01236	LAB		9-12	MTUWTH	323	N H B		MCKELVEY

ZOOL 340 NATURAL HISTORY OF THE VERTEBRATES.
PREREQUISITE--ONE YEAR OF BIOLOGY INCLUDING ZOOL. 101, CONSENT OF INSTRUCTOR.
5 HOURS, OR 1 UNIT

01237	LECT		1	MTUWTH	102C	VIVARIUM		SHOEMAKER,
01238	LAB	1	1-5	F	102B	VIVARIUM		BATCH
01239	LAB	2	8-12	S	102B	VIVARIUM		

DOL 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS AN. S. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 UNIT
01240 LAB ARR NALBANDOV

DOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF VERTEBRATES--

VERTEBRATE ANATOMY	BADER, SMITH
ENDOCRINOLOGY	HALL, NALBANDOV
HISTOLOGY	ADAMSTONE
ULTRASTRUCTURE	HALL
FUNCTIONAL ANATOMY	
VERTEBRATE PHYSIOLOGY	PROSSER

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF INVERTEBRATES--

HELMINTHOLOGY	KRUIDENIER, SILVERMAN
INVERTEBRATE ZOOLOGY	MATTESON
INVERTEBRATE PHYSIOLOGY	PROSSER,
PARASITOLOGY	KRUIDENIER, SILVERMAN
PROTOZOOLOGY	

EMBRYOLOGY AND BASIC KNOWLEDGE OF CELLS AND TISSUES--

CYTOLOGY	ADAMSTONE, DAVENPORT
EMBRYOLOGY AND REGENERATION	DAVENPORT, MOYER, WATTERSON
TOXICOLOGY	INGLE

PRINCIPLES OF ECOLOGY, PRINCIPLES OF TAXONOMY, NATURAL HISTORY--

ECOLOGY	KENDEIGH
ETHOLOGY	BARLOW
HERPETOLOGY	SMITH
ICHTHYOLOGY	SHOEMAKER
LIMNOLOGY	MATTESON
MAMMALOGY	HOFFMEISTER, LEE
ORNITHOLOGY	KENDEIGH
WILDLIFE MANAGEMENT	KENDEIGH, SHOEMAKER

GENETICS, PHYLOGENY, EVOLUTION--

GENETICS AND EVOLUTION	KITZMILLER, LUCE, NANNEY
VERTEBRATE PHYLOGENY & PALEONTOLOGY	BADER

01241 CONF ARR STAFF

TRIAL REGISTRATION FORM

Name.....
Last First Middle

Local Address.....

Telephone.....

Date.....

College.....

Curriculum.....

Class.....

Subject	Type	Course Number	Section	Credit	CALL Number	M	Tu	W	Th	F	S	Memo

TRIAL REGISTRATION FORM

Name.....
Last First Middle

Local
Address.....

Telephone.....

Date.....

College.....

Curriculum.....

Class.....

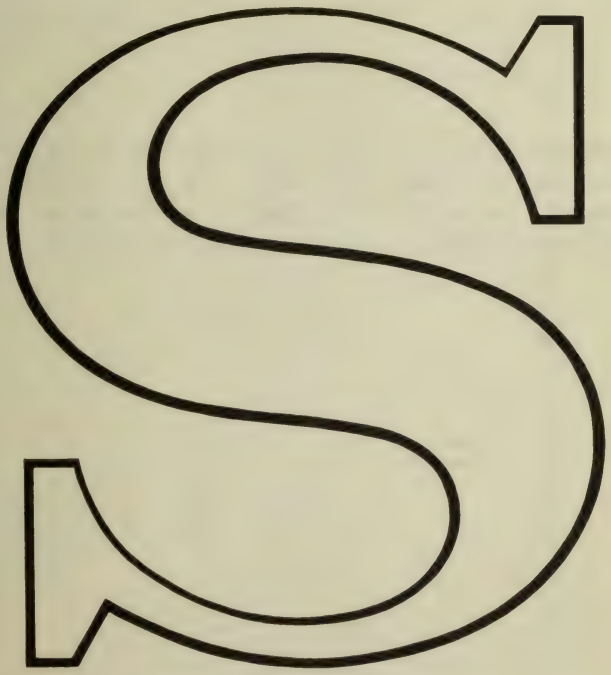
Subject	Type	Course Number	Section	Credit	CALL Number	M	Tu	W	Th	F	S	Memo

C
Zs1Ia
966

SUMMER · 1966

UNIVERSITY OF ILLINOIS
JUL 19 1966
LIBRARY

TIME TABLE



BULLETIN · UNIVERSITY OF ILLINOIS · URBANA DEPARTMENTS

SUMMER SESSION 1966

SUPPLEMENT INFORMATION ON PAGE 2

A supplement to the time table will be printed shortly before the summer session begins. Students and staff using the time table at the time of registration are advised to consult the supplement for possible changes. Copies are furnished to advisers and department offices.

UNIVERSITY OF ILLINOIS BULLETIN

Volume 63, Number 73; February 2, 1966. Published twelve times each month by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Office of Publication, 114 Altgeld Hall, Urbana, Illinois 61801.

CONTENTS

Calendar....4
General Information....5
Physical Examination....5
Admission and Readmission....6
Registration....7
Fees....9
Financial Aids....10
Final Examinations....10
Student Welfare....12
Room and Board....12
Illini Union....12
CIC Far Eastern Language Institute.14
Listing of Courses....15
Accountancy....16
Advertising....17
Aeronautical and Astronautical Engineering....18
Agricultural Economics....18
Agricultural Engineering....19
Agriculture....20
Agronomy....20
American Civilization....21
Animal Science....22
Anthropology....23
Architecture....24
Art....25
Asian Studies....30
Astronomy....31
Aviation....31
Bands....34
Biology....34
Biophysics....35
Botany....35
Business....36
Business Administration....37
Business Education....38
Business and Technical Writing....130
Ceramic Engineering....38
Chemical Engineering....43
Chemistry....39
Civil Engineering....43
Classics....45
Communications....45
Dairy Science....46
Dairy Technology....65
Division of General Studies....47
Economics....47
Educational Administration and Supervision....49
Educational Psychology....51
Electrical Engineering....54
Elementary Education....57
English....59
English as a Second Language....129
Entomology....63
Finance....64
Food Science....65
Forestry....66
French....66
General Education....69
General Engineering....70
Geography....71
Geology....73
Germanic Languages and Literatures....74
Greek....76
Health Education....77
Health Science....77
History....78
History and Philosophy of Education....80
Home Economics....82
Horticulture....83
Industrial Administration....84
Industrial Engineering....85
Italian....85
Journalism....86
Labor and Industrial Relations....86
Landscape Architecture....87
Latin....87
Latin-American Studies....88
Law....89
Library Science....91
Linguistics....93
Marketing....94
Mathematics....95
Mechanical Engineering....100
Medieval Civilization Studies....101
Metallurgical Engineering....101
Microbiology....102
Military Science....103
Mining Engineering....105
Music....105
Nuclear Engineering....113
Philosophy....113
Physical Education....116
Physical Education for Men....115
Physical Education for Women....118
Physics....119
Physiology....120
Plant Pathology....121
Political Science....121
Portuguese....123
Psychology....123
Radio and Television....126
Recreation and Municipal Park Administration....127
Rhetoric and Composition....127
Rural Sociology....19
Russian....130
Russian Language and Area Studies....132
Safety Education....133
Secondary and Continuing Education....134
Social Sciences....135
Sociology....135
Spanish....137
Special Education....139
Speech and Theatre....140
Theoretical and Applied Mechanics....143
Urban Planning....144
Veterinary Medical Science....144
Veterinary Medicine....145
Vocational and Technical Education....145
Zoology....147

CALENDAR FOR EIGHT-WEEK SUMMER SESSION, 1966

May 26, Thurs.-May 27, Fri.....Registration for 1966 summer session off-campus courses, College of Law, and registration staff.

June 6, Mon., 4:10 p.m.....Meeting of Urbana-Champaign Senate.

June 20, Mon.....Earliest date for special examinations.

June 20, Mon.....Registration of Summer Session non-degree candidates, undergraduate students, continuous graduate students, and new and readmitted graduate students who have received permits to enter by Friday, June 3, except for Institutes.

June 21, Tues.....Registration for summer institutes, graduate students not appearing at the appointed time on Monday, June 20, and new and readmitted graduate students receiving permits after Friday, June 3.

June 21, Tues., 7:00 a.m.....Instruction begins.

June 21, Tues., 6:45-10:00 p.m....Qualifying examination in English (for transfer students with eighty or more credit hours only).

June 27, Mon., 5:00 p.m.....Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range.

July 4, Mon.....Independence Day (holiday).

July 14, Thurs., 6:45-10:00 p.m...Qualifying examination in English.

July 18, Mon.....Beginning of second four-week courses.

July 19, Tues., 5:00 p.m.....Latest date for refund of one-half tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range.

July 20, Wed.....Earliest date for one-half credit if withdrawing from the University for military service (four weeks' instruction completed).

July 28, Thurs.....Latest date to withdraw from the University without petitioning for readmission.

Aug. 1, Mon.....Latest date for special examinations.

Aug. 3, Wed.....Latest date for foreign students who have not attended a college or university in the United States to apply for admission in September, 1966.

Aug. 3, Wed.....Earliest date for full credit if withdrawing from the University for military service (six weeks' instruction completed).

Aug. 11, Thurs.....Last day of instruction.

Aug. 12, Fri.-Aug. 13, Sat.....Summer session final examinations.

Aug. 15, Mon.-Sept. 10, Sat.....Corps of Engineers Post-Summer Session Courses (four weeks).

Aug. 15, Mon.....August graduation date (no Commencement Exercises).

Aug. 24, Wed.....Earliest date for special examinations.

Aug. 31, Wed.....Latest date for domestic students, or foreign students who have attended a college or university in the United States to apply for admission or readmission in September, 1966.

GENERAL INFORMATION

To serve those who desire to pursue summer study, the University of Illinois at Urbana is offering a comprehensive schedule of courses of eight weeks' duration, June 20 to August 13, 1966. A few departments are offering special intensive courses lasting only four to six weeks. All colleges on the Urbana campus are included in the summer program.

The University of Illinois Chicago Circle campus is offering a summer quarter from June 20 to September 2, 1966, and a short summer session from July 5 to August 12, 1966.

Courses in the eight-week summer session at Urbana-Champaign are selected to meet the needs of school teachers and administrators, librarians, athletic coaches, and others whose employment prevents attendance during the regular school year, as well as graduate students pursuing work leading to advanced degrees, undergraduate students at the University of Illinois or elsewhere who wish to accelerate their programs of study, and other persons for whom summer study will contribute to vocational or personal goals. The needs of teachers are met not only in the courses, institutes, and workshops in the College of Education, but also in a variety of courses elsewhere in the University.

Undergraduate and graduate students interested in taking independent study courses (reading and research) should confer with the head of the department concerned.

The resources of the University are open to students throughout the summer. They may take advantage of the extensive facilities of the University Library, the largest in any state university and third among all American universities, with almost 5,343,000 books, films, pamphlets, music scores and parts, maps, manuscripts, and more than 20,000 periodicals and newspapers. They may profit from the museums, collections, shops, and laboratories. There are cultural and recreational opportunities — lectures, readings, concerts, theatre productions, dances, and social events.

General information concerning admission, registration procedures, fees, and board and room is given below. The courses offered in the eight-week summer session are listed alphabetically beginning on page 16.

The final date on which any student may withdraw from a course without accepting a grade of "E" in advance is determined by the dean of his college. For undergraduate students registered as non-degree candidates in the Summer Session, this date is July 25, 1966.

PHYSICAL EXAMINATION

All new students proposing to enroll in the University of Illinois at Urbana-Champaign for a full semester are required, before completion of their first registration, to present adequate evidence of satisfactory physical and mental health as determined by the Director of Health Services.

The pre-entrance examination, except for foreign students, may be performed at the student's expense by a properly qualified doctor of medicine of his choice or by the Health Service free of charge until fifteen days prior to the registration date for the particular semester. It must be performed within the six-month period immediately preceding the registration date and is subject to final evaluation and approval by the Director of Health Services. Detailed explanatory material and medical forms for reporting the pre-entrance examination are forwarded to each student who receives a permit to enter in a fall or spring semester.

New students enrolling in the summer session are required to take the tuberculin test administered without charge by the Health Service as part of the registration procedure, but are not required to take the physical examination until such time as they enroll for a full semester. The tuberculin test is also administered during registration to all readmitted students who have been absent for a semester or more.

Anyone who has had a normal chest film within the past six months, and presents evidence thereof, is excused from the tuberculin test. Military personnel on active status are exempted from the tuberculin test; teachers presenting an x-ray report from their local public health department, dated within the previous six months, which declares them to be free from tuberculosis, are also exempted from the tuberculin test.

All high school and elementary school students coming to the campus for periods exceeding ten days are required to pass a physical examination, but are not required to take the tuberculin test.

In any particular situation where it is deemed advisable by the Health Service for public health reasons, the physical examination and tuberculin test may be required. All foreign students must pass a physical examination administered by the University Health Service before receiving a permit to register, and all students who have lived abroad for an academic year or its equivalent are required to have a complete physical examination when returning to reregister in the University.

ADMISSION AND READMISSION

Because existing facilities are inadequate to accommodate all qualified applicants for admission and readmission in the fall and spring semesters, acceptance in the Summer Session does not guarantee approval for continuation in a following semester. A separate application for admission in September or February must be submitted.

Admission and Readmission as Candidates for Degrees

All students, *graduate and undergraduate,* not previously enrolled at the University of Illinois, who are planning to register for the first time this summer, should submit applications for admission and complete credentials to the Director of Admissions and Records well in advance of June 20, 1966. Application blanks may be obtained by writing to the Office of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61801.

Candidates for advanced degrees who were registered in the Graduate College for resident study, or in extramural courses as degree candidates, in the 1965 summer session or in the first or second semester of 1965-66, *need not apply for readmission to the 1966 summer session.*

Other former graduate students, and all former undergraduate students not in attendance the second semester of 1965-66, who expect to return this summer, should file applications for readmission well in advance of registration in order to allow ample time for preparation of registration materials. This will facilitate the entire procedure for each student concerned and avoid unnecessary delay in completing his registration. New and readmitted graduate students whose applications are not received in time to be processed by Friday, June 3, will be required to postpone their registration until Tuesday, June 21.

Applicants for readmission who have not notified the Director of Admissions and Records in advance of registration day of their intentions to re-enter, and new students who have not received a permit to enter, should go first to the Office of Admissions and Records, 100a Administration Building. Undergraduate students report to Windows 8, 12, or 14; graduate students report to Windows 20 or 21. *They may go there at any time without respect to the alphabetical order of registration on page 8.*

Former students are considered for readmission to the college in which they were previously enrolled, if in good standing at the last attendance, unless they request transfer to the Summer Session with non-degree status. In such cases, they must obtain releases from their former colleges. Former students not in good standing must petition for readmission to the University in their former colleges, another college, or the Summer Session.

For additional information on any matter pertaining to admission or readmission, write to the Director of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61801.

Admission of New Undergraduate Students as Candidates for Degrees

Applications for admission to the 1966 summer session from new undergraduate students, *as candidates for degrees,* will be considered only if applicants have previously applied and been approved for admission to a college in the fall, and have paid the required $30.00 advance deposit on their fall semester tuition and fees. This deposit is not applicable on their summer session tuition and fees. Such students will be admitted directly to the college and curriculum of their choice. Consult the Undergraduate Study catalog for information concerning requirements for admission to the various curricula.

All applications from beginning freshmen for admission to the University as candidates for degrees are considered on the basis of a combination of high school rank and scores on prescribed admission tests, and distribution of academic subjects prescribed for the chosen curriculum. (Either the ACT or the SAT of the CEEB have been approved for admission testing purposes, but those presenting SAT scores still must submit ACT scores no later than fifteen days following registration.)

Nonresident freshmen must rank at least in the top quarter of their high school graduating class, and nonresident transfers must present a cumulative scholastic average of at least 3.25 in terms of the University of Illinois grading system.

Admission and Readmission as Non-Degree Candidates

Applications of *undergraduate* students for admission or readmission to the Summer Session, not as candidates for degrees, should be submitted to the Office of Admissions and Records well in advance of registration day. They may be approved by the Director of Admissions and Records or the Summer Session Office for enrollment in the Summer Session under one of the following conditions:

1. High school graduates who qualify for admission under minimum admission requirements, but who have not been admitted for the fall semester, may be admitted to the Summer Session only as non-degree candidates. Minimum requirements for residents of Illinois include rank in the top half of their graduating class or test scores at a level which compensates for the lower rank. Nonresident applicants must rank at least in the top quarter of their class. (Students who have received permits to enter in September and who wish to enroll in the summer will register in their colleges at the beginning of the summer session.)
2. Former University of Illinois students who have not graduated from the University may register as non-degree candidates if they secure a release from the college at the University of Illinois in which they were last enrolled, and if such enrollment is approved by the Director of Admissions and Records or by the Summer Session Office.
3. Undergraduate students enrolled in other institutions may enroll in the Summer Session as non-degree candidates if they present a statement of eligibility to return to the collegiate institution last attended.
4. Persons employed as teachers who submit statements from the school authorities attesting to their employment may enroll in the Summer Session as non-degree candidates.
5. Other persons, twenty-one years of age or over, who have never attended a collegiate institution but give evidence that they possess the requisite background and ability to pursue profitably courses for which they are qualified, may enroll in the Summer Session as non-degree candidates.

Students on drop or probationary status must petition the Summer Session Office for admission as non-degree candidates. If approved, they will be admitted on probation.

Approval of admission or readmission as a non-degree candidate in the Summer Session in no way affects a student's future standing in a college, and satisfactory performance is no assurance of approval for continuation in the fall or at any future time. Students admitted to the Summer Session as non-degree candidates who later wish to enter one of the colleges of the University as degree candidates must seek admission in the usual manner and satisfy requirements in effect at the time of application.

Graduate students must qualify for admission to the Graduate College and meet the requirements of the department in which they wish to study.

REGISTRATION

All students, new and readmitted, will be required to present Social Security numbers, which will become their permanent identification numbers, during registration. Any student who does not have such a number should obtain one from his local Social Security Office before coming to the campus.

Eight-Week Courses

Monday, June 20, through Saturday, August 13, 1966

No course may be taken for graduate credit unless it is so designated in this time table of courses offered. The normal credit which a graduate student can earn in eight weeks is two units. In exceptional cases, two and one-half units may be carried with the approval of the adviser. Under no circumstances is a graduate student permitted to carry more than two and one-half units.

The normal full-time registration for an undergraduate student in the eight-week summer session is eight semester hours. More or less than a normal program is permitted only by authority of the dean of the student's college.

Further information concerning the regulations for advanced degrees is contained in the catalog of the Graduate College, copies of which may be obtained by writing to the Office of Admissions and Records, 100a Administration Building, or to the Graduate College, 330 Administration Building.

ORDER OF REGISTRATION

Monday, June 20, and Tuesday, June 21, 1966

Monday, June 20

New and readmitted graduate students who have received permits to enter the University by Friday, June 3, continuous graduate students, Summer Session non-degree candidates, and undergraduate students, except summer institute students, register on this day.

Tuesday, June 21

Participants in the summer institutes, graduate students not appearing at the appointed hour on Monday, June 20, and new and readmitted graduate students receiving permits to enter the University after Friday, June 3, register on this day.

Graduate Students

The program request card and other preliminary registration materials may be obtained in advance of registration days at the department offices on or after Tuesday, June 14. After the preliminary materials have been completed in consultation with the adviser, authorization cards for completion of registration will be distributed in the English Building (enter northwest door), in accordance with the alphabetical schedule below.

Undergraduate Students

Both new and former Summer Session students not assigned to a college will receive registration forms in 173 Armory; other undergraduate students will receive registration materials at the offices of the deans of their colleges.

Graduate and Undergraduate Students

Authorization cards to complete registration will be released to those scheduled to register on each of the registration days (June 20 and June 21) in accordance with the following alphabetical schedule, *but not before.*

A through B..... 8:00 a.m.
C through E..... 9:00 a.m.
F through He.....10:00 a.m.
Hf through Lar.....11:00 a.m.
Las through M..... 1:00 p.m.
N through Ro..... 2:00 p.m.
Rp through Ta..... 3:00 p.m.
Tb through Z..... 4:00 p.m.

Graduate students authorized to register on Monday, June 20, who do not appear at the appointed time, will be required to defer registration until Tuesday, June 21.

Graduate and undergraduate registrations are completed in the Armory through Tuesday, June 21. After June 21, authorization cards are distributed from the college offices and registrations are completed in the Administration Building. Any registration, except for registrations in second four-week courses only, completed after 5:00 p.m. on Tuesday, June 21, 1966, will be considered a late registration, and the student will be subject to a late registration fine of $15.00.

Second Four-Week Courses

Monday, July 18, through Saturday, August 13, 1966

Students wishing to register only in courses offered in the second four weeks of the eight-week summer session should complete their registration on or before Monday, July 18, 1966. The late registration fine of $15.00 is assessed all students registering in these courses after July 18, 1966.

Directory of Registration Offices

Admissions and Records:
Graduates and Undergraduates.....100a Administration Building
Agriculture, College of.....104 Mumford Hall
Aviation, Institute of.....318 Engineering Hall
Commerce and Business Administration, College of.....215a David Kinley Hall
Education, College of.....110 Education Building
Engineering, College of.....119 Engineering Hall
Fine and Applied Arts, College of.....110 Architecture Building
Graduate College.....321 Administration Building
Journalism and Communications, College of.....119 Gregory Hall
Law, College of.....209 Law Building
Liberal Arts and Sciences, College of.....294 Lincoln Hall
Physical Education, College of.....107 Huff Gymnasium
Summer Session.....349 Administration Building
Veterinary Medicine, College of.....135 Veterinary Medicine Building

FEES

All fees are due and payable in full at the time of registration unless the Installment Plan is elected. An additional charge of $2.00 is made for this service. Arrangement for installment payment should be made at Station 5 in the Armory during the regular registration period.

During the registration period, applications for exemption from the University insurance should be presented at Station 3A in the Armory prior to request for tuition or fee adjustment or payment. After registration days, applications for exemption should be presented at the University Insurance Office, 208 Administration Building.

The fees are as follows:

	Full Program		Partial Programs			
	Range I		Range II		Range III	
	Above 5 hours Above 1¼ units		Above 2½ to 5 hours Above ¾ to 1¼ units		Above 0 to 2½ hours Above 0 to ¾ unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
Tuition (except those holding exemptions)	$45.00	$190.00	$30.00	$130.00	$20.00	$80.00
Service Fee[1]	20.00	20.00	15.00	15.00	5.00	5.00
Hospital-Medical-Surgical Insurance Fee[2, 3]	10.00	10.00	10.00	10.00	10.00	10.00
Total	$75.00	$220.00	$55.00	$155.00	$35.00	$95.00

[1] Persons on appointment for at least 25 per cent of full-time service on the academic, administrative, or permanent nonacademic staff of the University, or on the staffs of allied agencies, and persons registered *in absentia* or in courses conducted off campus are exempt from the Service Fee.

[2] Students presenting evidence of equivalent coverage may receive a waiver of this fee upon approval of a petition submitted to the University Insurance Office not later than the final date established for full refund of fees. A signed waiver and assumption of responsibility is also required. Persons registered for thesis research *in absentia* are not assessed this fee.

[3] If insurance coverage for the period between the close of the summer session and the beginning of the first semester is not desired, $5.00 will be refunded if requeted in writing prior to the final date established for full refund of fees.

Registration in Noncredit Courses (All Campuses)

Students who register in noncredit courses pay tuition and fees as follows:

1. Persons (except those holding exemptions) who register in the summer session *on campus* for doctoral thesis research (499) only, without credit, are charged the following:
   Tuition..... $10.00
   Service Fee 5.00
   Hospital-Medical-Surgical Insurance Fee..... 10.00
2. Persons who register for doctoral thesis research (499) *in absentia* without credit are charged only a tuition fee of..... $10.00
   (Those registered *in absentia* for credit pay the regular tuition, resident or nonresident, as applicable.)
3. Persons who register in noncredit seminars, either alone or in addition to other courses.....*No charge*
   (Regular tuition and fees which are applicable are assessed for other courses taken concurrently.)
4. Persons not holding tuition waivers who register for less than a full program of credit courses (Range II or III) pay for each noncredit course..... $15.00
   (This is in addition to the required tuition and fees for credit courses.) If taken alone, noncredit courses other than thesis research and seminar are assigned to Range III.
5. University employees who register at the request of their department in noncredit courses especially established to improve the work of the employee .....*No charge*
   (Regular tuition and fees which are applicable are assessed for other courses taken concurrently.)
6. Persons wishing to attend a campus course as a visitor only (special permit required) pay for each course a fee of..... $15.00

The above list of fees includes only those that are generally applicable to all students at Urbana. Complete information concerning fees applicable only in special cases (as change of program after registration, flight instruction fee, visitor's fee, etc.) and fee exemption regulations are contained in the University's Undergraduate Study and the Graduate College catalogs, and the current edition of *Regulations Applying to All Undergraduate Students,* or may be obtained in 69 Administration Building.

FINANCIAL AIDS

Limited amounts of scholarship and loan funds are available for students attending the University in the summer. For detailed information about scholarships, write to the Director of the Undergraduate Scholarship Program, 907 South Sixth Street, Champaign, Illinois 61820. Application blanks and information about loan funds at the University of Illinois in Urbana may be obtained from the office of the Bursar, 100b Administration Building, Urbana 61801, or the offices of the Dean of Men, 110 Student Services Building, or the Dean of Women, 130 Student Services Building, Champaign, Illinois 61820. Information concerning National Defense Education Act loan funds may be obtained from the office of the Dean of Students, 310 Student Services Building, Champaign 61820.

FINAL EXAMINATIONS

Eight-Week Courses

Friday, August 12, and Saturday, August 13, 1966

Final Examinations Must Be Given at the Times Specified Unless a Change Is Approved in Advance by the Provost

The examinations for classes meeting four, five, or six times a week are *two hours* in length; those for classes meeting one, two, or three times a week are *one hour* in length. Where it is desired to give a two-hour examination in

a course regularly scheduled for a one-hour examination, the time for the examination should be arranged by the instructor at any hour on either of the examination days that will avoid conflicts.

Examinations for courses meeting only once a week and for courses meeting at 12:00 noon or after 4:00 p.m. should be arranged by the instructor at any hour within the examination period (August 12 and 13) that will avoid conflicts.

For courses meeting two to six times a week, the schedule of examinations is as follows:

Seven o'clock Classes

Meeting four, five, or six days a week.....Friday, 7:00- 9:00 p.m.
Meeting MWF, or any two of those days.....Friday, 7:00- 8:00 p.m.
Meeting TTS, or any two of those days.....Friday, 8:00- 9:00 p.m.

Eight o'clock Classes

Meeting four, five, or six days a week.....Saturday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Saturday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 11:00-12:00 noon

Nine o'clock Classes

Meeting four, five, or six days a week.....Saturday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 2:00- 3:00 p.m.

Ten o'clock Classes

Meeting four, five, or six days a week.....Friday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Friday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Friday, 9:00-10:00 a.m.

Eleven o'clock Classes

Meeting four, five, or six days a week.....Friday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Friday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Friday, 2:00- 3:00 p.m.

One o'clock Classes

Meeting four, five, or six days a week.....Friday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Friday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Friday, 4:00- 5:00 p.m.

Two o'clock Classes

Meeting four, five, or six days a week.....Saturday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 4:00- 5:00 p.m.

Three o'clock Classes

Meeting four, five, or six days a week.....Friday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Friday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Friday, 11:00-12:00 noon

Four o'clock Classes

Meeting four, five, or six days a week.....Saturday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Saturday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 9:00-10:00 a.m.

Note: For a course so scheduled that the final examination may be given in more than one period, the earliest time in the examination schedule must be chosen. For example, for a course regularly meeting from 1:00 to 3:00 p.m. on Monday, Wednesday, and Friday, or any two of those days, the examination should be scheduled for Friday, 3:00 to 4:00 p.m., not Saturday, 3:00 to 4:00 p.m.

Students in courses regularly meeting on a half-hour schedule, e.g., 10:30 a.m. to 12:00 noon on Monday, Tuesday, Thursday, and Friday, should be given the examination according to the full hour sequence in which they fall, i.e, 11:00 a.m. to 12:00 noon, with the final examination scheduled from 1:00 to 3:00 p.m. on Friday.

Multiple instructional courses including at least two lectures per week at the

same hour must schedule the final examination according to the sequence in which the lectures occur, irrespective of the times of discussion or laboratory periods.

STUDENT WELFARE

The University makes every effort to provide the most favorable conditions for the life of the student while he is living in the community. The Dean of Students coordinates and unifies the work of the agencies interested in the student's well-being and gives advice and guidance on problems outside the classroom. Advisers and members of the academic faculty assist students in arranging programs of study and advise them relative to their classroom work. Aptitude testing and counseling services are provided by the Student Counseling Service.

The University Health Service for students, located in McKinley Hospital, 1109 South Lincoln Avenue, Urbana, Illinois, is maintained to promote physical and mental health, to control communicable diseases, and to teach the essentials of healthful living. McKinley Hospital serves both students and faculty.

The office of the Dean of Students maintains an employment service for students who desire part-time employment while attending the University. No charge is made for this service.

The offices of the Dean of Students, Student Employment, and the Student Counseling Service are located in the Student Services Building, 610 East John Street, Champaign, Illinois 61820.

ROOM AND BOARD

During the eight-week summer session, housing and food service accommodations in University residence halls will be available in the Illinois Street Residence Halls. All facilities other than the living units are operated on a coeducational basis with dining, lounge, recreation, library, and office facilities being shared by the men and women residents. All shared facilities are air conditioned. Room and board rates for the entire eight-week session are approximately as follows:

	20 Meals per Week	*15 Meals per Week*
Single Room	$224.00	$199.00
Double Room	204.00	179.00

Arrangements may also be made for rooms without board in one of the other residence halls. Rates for the entire eight-week session are as follows:

Single Room	$104.00
Double Room	84.00

Certain other facilities may become available. All prices quoted are subject to change.

Some space in other residence halls is available for the use of persons attending University-sponsored short courses or conferences during the summer period. The charge for housing accommodations is $3.15 to $4.40 a person per night and the daily charge for meals is $3.75. For information on this type of housing, write to the Conference Coordinator, 420 Student Services Building, Champaign, Illinois 61820.

Applications for residence may be obtained from the Housing Division, 420 Student Services Building.

Rooms, and in some cases, room and board, are also available at privately-operated housing units near the campus. Facilities in housing of this type are listed in the Housing Division Office. Room lists and additional information may be obtained by writing the Housing Division.

ILLINI UNION

The Illini Union is the community center for the students, faculty, staff, and alumni on the Urbana campus of the University of Illinois. In conjunction with other student organizations, the Illini Union sponsors a broad program of social, cultural, and recreational activities for the students. Among its many facilities are various food service units consisting of a cafeteria, snack bar, dining room, and several banquet rooms. The various lounges are meeting places for students and faculty between classes and at other free times. The Browsing Room contains the latest fiction, biography, and other books for general reading as well as

a record-lending library. The Illini Union also houses the Book Center, a bookstore which offers high quality paperback editions of American and foreign publications, hard cover University of Illinois Press publications, and some periodicals of limited circulation. Approximately 10,000 titles are available.

Programs of recorded classical music are held under the direction of a student committee. Recreational facilities include bowling, billiard tables, television, and rooms for games. Dances are scheduled during the week. All students are entitled to the full use of the facilities of the Illini Union.

The Illini Union also sponsors a movie program consisting of Wednesday and Friday evening presentations of popular films at a nominal charge.

ADDITIONAL INFORMATION

For additional information concerning attendance in the summer session at the University of Illinois, write to:

Director of Admissions and Records
University of Illinois
100a Administration Building
Urbana, Illinois 61801

THE CIC FAR EASTERN LANGUAGE INSTITUTE AT THE UNIVERSITY OF MINNESOTA

June 13 through August 20, 1966

The Committee on Institutional Cooperation (CIC), consisting of the universities of "The Big Ten," plus the University of Chicago, offers the fourth of five rotating Far Eastern Language Institutes at the University of Minnesota during the summer of 1966.

For qualified University of Illinois undergraduate students who participate in this program, the courses will be exactly as though taken at this University. That is, they will count toward the degree and they will count as residence credit.

The faculty will be drawn from the Chinese and Japanese teaching staffs of the CIC institutions, to whom specialists from universities outside the Big Eleven will be added.

A limited number of grants for scholarships and fellowships will be available for students who show high competence.

During the summer of 1966, intensive courses will be offered in elementary, intermediate, and advanced Chinese and Japanese at the undergraduate and graduate level. University of Illinois graduate students who participate in the program may petition for credit in the usual way if the work taken is at the graduate level.

Students desiring further information concerning these courses or forms of financial aid connected with the program should see Director Solomon B. Levine, 1207 West Oregon Street, Urbana, Illinois 61801.

Undergraduate and graduate participants in the CIC Far Eastern Language Institute register and pay their tuition and fees at the host institution, paying either the amount required at the host or the home institution, whichever is lower.

LISTING OF COURSES

The following time table of summer courses offered by the University is subject to whatever changes may prove necessary at registration time. Notices of all changes in time or place of meeting of classes will be supplied to advisers for checking program cards during registration. Names of instructors are listed subject to their acceptance of appointment for summer service.

Arrangement

The arrangement of subjects in this time table is alphabetical. The courses offered in each subject are listed numerically with headings to indicate the students for whom they are designed. Courses for undergraduates (designed for freshmen and sophomores) are numbered 100 to 199; for advanced undergraduates (designed for juniors and seniors), 200 to 299; for advanced undergraduates and graduates (junior, senior, or graduate standing required), 300 to 399; for graduates, 400 to 499. Following the title of each course is a statement of the requirements, if any, for admission to the course.

Class periods for each course are indicated by numerals for the hours of the day and by letters for the days of the week. For example, "8-10 MWF" indicates that the class period begins at 8:00 a.m. and continues for two hours on Monday, Wednesday, and Friday; while "11 TTS" means that the class period begins at 11:00 a.m. and continues for fifty minutes on Tuesday, Thursday, and Saturday. The place of meeting of each class is shown by the number of the room and the name of the building.

Credit

Credit is counted in semester hours for undergraduates and in units for graduates, as shown in the description of each course.

Students having ninety or more hours of credit, without regard to the division in which they may be enrolled, are classified as seniors for the purpose of designating those freshman courses which, when taken by seniors or graduate students, carry reduced credit.

Some courses have variable credit, as 3 to 5 hours or ½ to 2 units, and in registering for a course with variable credit each student puts on his program card the number of hours or units for which he intends to take the course.

Buildings

University buildings are designated by the following abbreviations:

Administration Building....Admin
Aeronautical Engineering Laboratory..Aero Lab
Agricultural Engineering Building....Agr Eng
Altgeld Hall....AH
Animal Genetics Building....An Gen
Animal Sciences Laboratory....ASL
Architecture Building....Arch
Bevier Hall....Bev Hall
Burnsides Research Laboratory....BRL
Burrill Hall....Bur Hall
Ceramics Building....Cer
Chemistry Annex....CA
Child Development Laboratory....CD
Commerce Annex....Com Annex
Commerce and Business Administration Building....Com W
Dairy Manufactures Building....DMB
Davenport Hall....DH
David Kinley Hall....DKH
East Chemistry Building....EC
Education Building....Educ
Educational Projects and Guidance Building....EPGB
Electrical Engineering Annex....EE Annex
Electrical Engineering Building....EEB
Engineering Hall....EH
English Building....EB
Fine and Applied Arts Building....FAB
Floriculture Building....Flor
Foundry and Pattern Laboratory....Fdy & Pat Lab
Gregory Hall....GH
Harker Hall....HH
Hill Annex....HA
Horticulture Field Laboratory....HFL
Huff Gymnasium....HG
Hydraulic Engineering Laboratory....Hyd Eng Lab
Illini Hall....IH
Krannert Art Museum....KM
Labor and Industrial Relations Building....ILIR
Law Building....Law
Library....Lib
Lincoln Hall....LH
Mechanical Engineering Building....MEB
Mechanical Engineering Laboratory....MEL
Men's Old Gymnasium....MOG
Metallurgy and Mining Building....MMB
Morrill Hall....Mor Hall
Mumford Hall....MH
Natural History Building....NHB
Noyes Laboratory of Chemistry....NL
Nuclear Engineering Laboratory....NEL
Observatory....Observ
Physics Building....PB
Practice Annex....PA
Quonset....Q
Rehabilitation-Education Center..Rehab Center
Rural Electric Laboratory....RE Lab
Smith Music Hall....SMH
Speech Clinic....Sp Clinic
Stiven House....SH
Stock Judging Pavilion....SP
String Annex....SA
Surveying Building....Surv Bldg
Talbot Laboratory....TL
Theory Annex....TA
Transportation Building....TB
Turner Hall....TH
University High School....UHS
Vegetable Crops Building....Veg Crops
Veterinary Clinic, Large Animal....VCLA
Veterinary Clinic, Small Animal....VCSA
Veterinary Medicine Building....VM
Women's Gymnasium....W Gym

ACCOUNTANCY

DEPARTMENT OFFICE 360 COM W

COURSES FOR UNDERGRADUATES

ACCY 101 PRINCIPLES OF ACCOUNTING I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

00019	LECT-DISC	C	10	MTUWTHFS	152	COM W	BEDFORD

ACCY 105 PRINCIPLES OF ACCOUNTING II.
PREREQUISITE--ACCY. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

00027	LECT-DISC	A	8	MTUWTHFS	152	COM W	FESS

ACCY 108 INTERMEDIATE ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS

00035	LECT-DISC	B	9	MTUWTHFS	152	COM W	DUNHAM

ACCY 166 COST ACCOUNTING.
PREREQUISITE--ACCY. 105.
3 HOURS

00043	LECT-DISC	D	11	MTUWTHFS	226	COM W	URETSKY

COURSES FOR ADVANCED UNDERGRADUATES

ACCY 201 FUNDAMENTALS OF ACCOUNTING.
FOR NON-COMMERCE STUDENTS ONLY.
3 HOURS

00051	LECT-DISC	C	10	MTUWTHFS	226	COM W	WAKEFIELD

ACCY 274 BASIC FEDERAL INCOME TAX ACCOUNTING.
PREREQUISITE--ACCY. 108.
3 HOURS

00060	LECT-DISC	A	8	MTUWTHFS	226	COM W	BRIGHTON

ACCY 294 SENIOR RESEARCH.
PREREQUISITE--CUMULATIVE GRADE POINT AVERAGE OF 4.0 OR HONORS IN JUNIOR YEAR OR CONSENT OF INSTRUCTOR. SENIOR STANDING.
2 TO 4 HOURS

00078	CONF		ARR		360	COM W	DEMARIS

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ACCY 308 ADVANCED ACCOUNTING.
PREREQUISITE--ACCY. 106 OR 166, AND 108, AN AVERAGE OR C OR BETTER IN PRECEDING COURSES IN ACCOUNTANCY.
3 HOURS, OR 3/4 UNIT

00086	LECT-DISC	C	10	MTUWTHFS	30	COM W	LUKAS

ACCY 371 AUDITING.
PREREQUISITE--ACCY. 308.
3 HOURS, OR 3/4 UNIT

00094	LECT-DISC	B	9	MTUWTHFS	226	COM W	WAKEFIELD

ACCY 377 ADVANCED PROBLEMS.
PREREQUISITE--SENIOR STANDING, CREDIT OR REGISTRATION IN ACCY. 371.
3 HOURS, OR 1 UNIT

00107	LECT-DISC	D	11	MTUWTHFS	30	COM W	LUKAS

COURSES FOR GRADUATES

ACCY 461 ADMINISTRATIVE ACCOUNTING.
1 UNIT

00115	LECT-DISC	2-4	TU	F	120	COM W	HOLZER

ACCY 466 COST ACCOUNTING THEORY AND ANALYSIS.
1 UNIT

00123	LECT-DISC	10-12	M	TH	120	COM W	DICKEY

ACCY 481 CONCEPTS AND PRINCIPLES.
1 UNIT

00131	LECT-DISC	10-12	TU	F	120	COM W	WYATT

ACCY 483 INCOME DETERMINATION.
1 UNIT

00140	LECT-DISC	2-4	M	TH	120	COM W	BEDFORD

ACCY 493 SPECIAL RESEARCH PROBLEMS.
1/4 TO 2 UNITS

00158	CONF	10-12		W	120	COM W	HOLZER

ACCY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
M. S. CANDIDATES SHOULD REGISTER IN SECTION S1, AND PH. D. CANDIDATES IN SECTION S2.

00166	DISC	*S1	2-4	W	226	COM W	DICKEY
00174	DISC	*S2	2-4	W	226	COM W	DICKEY

ADVERTISING

DEPARTMENT OFFICE 103 G H

COURSES FOR ADVANCED UNDERGRADUATES

ADV 281 INTRODUCTION TO ADVERTISING.
3 HOURS

00182	LECT-DISC	10	MTUWTHF		225	G H	MCCLURE
		4	W		225	G H	

ADV 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS

00191	CONF	ARR	MCCLURE

COURSES FOR GRADUATES

ADV 484 ADVERTISING AND CONSUMER BEHAVIOR.
1 UNIT

00203	LECT-DISC	10-12	M	W	123	G H	BARBAN

ADV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN ADVERTISING.
1 OR 2 UNITS

00211	CONF	ARR	SANDAGE

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

DEPARTMENT OFFICE 101 T B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

A A E 391 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT

00220	CONF		ARR		STAFF

COURSES FOR GRADUATES

A A E 493 SPECIAL PROBLEMS.
1 OR 2 UNITS

00238	CONF		ARR		STAFF

A A E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00246	CONF	A	ARR		STAFF
00254	CONF	HOB	ARR		BARTHEL
00262	CONF	CEB	ARR		BOND
00271	CONF	TCC	ARR		CHEN
00289	CONF	BLH	ARR		HICKS
00297	CONF	HHH	ARR		HILTON
00300	CONF	HWK	ARR		KNOEBEL
00318	CONF	YKL	ARR		LIN
00326	CONF	JLL	ARR		LOTH
00334	CONF	RWM	ARR		MCCLOY
00342	CONF	AIO	ARR		ORMSBEE
00351	CONF	LHS	ARR		SENTMAN
00369	CONF	HSS	ARR		STILLWELL
00377	CONF	RAS	ARR		STREHLOW
00385	CONF	SMY	ARR		YEN
00393	CONF	ARZ	ARR		ZAK

AGRICULTURAL ECONOMICS
INCLUDING RURAL SOCIOLOGY

AGRICULTURAL ECONOMICS

DEPARTMENT OFFICE 305 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG EC 312 FARM APPRAISALS.
SAME AS AGRON. 312.
PREREQUISITE--AGRON. 101, AG. EC. 220 OR THEIR EQUIVALENT.
FIELD TRIPS, ESTIMATED EXPENSE, $7.
5 HOURS, OR 1 UNIT

00406	LECT-DISC	A	8-10	M	WTHF	320	M H	REISS AND
		A	1-5		TH	320	M H	OTHERS

AG EC 332 LIVESTOCK MARKETING.
SAME AS AN. S. 332.
PREREQUISITE--ECON. 108, AG. EC. 230 OR MKTG. 101.
FIELD TRIP, ESTIMATED EXPENSE, $10.
3 HOURS, OR 3/4 OR 1 UNIT
FIRST FOUR WEEKS.
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.

00414	LECT-DISC	A	*10-12		MTUWTHF	316N	M H	BROADBENT

COURSES FOR GRADUATES

AG EC 491 SEMINAR AND SPECIAL TOPICS.
EACH GRADUATE STUDENT WHOSE MAJOR IS AGRICULTURAL ECONOMICS MUST REGISTER IN THIS COURSE.
*ONLY STUDENTS WHO REGISTER FOR CREDIT AND COMPLETE SPECIAL STUDIES UNDER DIRECTION OF ONE OR MORE STAFF MEMBERS WILL RECEIVE CREDIT.
*0 TO 2 UNITS

00422	LECT-DISC	T	3-5	TU	405	M H	STAFF

AG EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00431	CONF		ARR				STAFF

RURAL SOCIOLOGY
DEPARTMENT OF AGRICULTURAL ECONOMICS

COURSES FOR ADVANCED UNDERGRADUATES

R SOC 277 RURAL SOCIAL CHANGE.
SAME AS SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

00449	LECT-DISC	C	10	MTUWTHF	316S	M H	FOLSE
		C	11	TU	316S	M H	

COURSES FOR GRADUATES

R SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS.

00457	LECT-DISC	C	10-12	MTUWTH	313	M H	LINDSTROM

R SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

00465	CONF		ARR				STAFF

AGRICULTURAL ENGINEERING

DEPARTMENT OFFICE 245 AGR ENG

COURSES FOR ADVANCED UNDERGRADUATES

AG E 296 HONORS PROJECT.
PREREQUISITE--JAMES SCHOLAR IN ENGINEERING--CONSENT OF INSTRUCTOR.
1 TO 4 HOURS

00473	CONF	E	ARR				STAFF

AG E 299 UNDERGRADUATE THESIS.
PREREQUISITE--AG. E. 298 AND SENIOR STANDING IN ENGINEERING.
2 TO 4 HOURS

00481	CONF	ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 300 SPECIAL PROBLEMS.
PREREQUISITE--NONENGINEERING STUDENT, MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND SPECIAL PROBLEMS COURSE.
3 HOURS, OR 1/2 UNIT

00490	CONF	ARR					STAFF

AG E 361 DEVELOPMENT AND FUNCTION OF FAMILY HOUSING.
SAME AS H. EC. 361.
3 HOURS, OR 3/4 UNIT
SECOND FOUR WEEKS.

00502	LECT-DISC	8-11	M W F	218	AGR ENG	HANSEN
	LAB	8-11	TU TH	209	AGR ENG	HANSEN

AG E 396 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING.
3 HOURS, OR 1/2 UNIT

00511	CONF	ARR					STAFF

COURSES FOR GRADUATES

AG E 496 PROBLEMS IN AGRICULTURAL ENGINEERING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1 UNIT

00529	CONF	ARR					STAFF

AG E 499 THESIS RESEARCH.
1 TO 2 UNITS

00537	CONF	ARR					STAFF

AGRICULTURE

COURSES FOR ADVANCED UNDERGRADUATES

AGR 208 COOPERATIVE EXTENSION WORK--SUMMER TRAINING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

00545	CONF	ARR					ANDERSON

AGRONOMY

DEPARTMENT OFFICE W201 T H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AGRON 300 ADVANCED SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
*CREDIT IS NOT GIVEN TO GRADUATE STUDENTS MAJORING IN AGRONOMY.
*3 TO 5 HOURS, OR 1/2 TO 2 UNITS

00553	LAB-DISC	ARR					STAFF

AGRON 303 SOIL FERTILITY.
PREREQUISITE--AGRON. 101.
*CREDIT IS NOT GIVEN FOR AGRON. 303 AND AGRON. 309 AND 310. CREDIT IS NOT GIVEN TOWARD PH.D. FOR MAJOR OR SOLE MINOR IN AGRONOMY-SOILS.
*3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS.
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.

00561	LECT-DISC		*8-10	MTUWTHF	W115	T H		KURTZ

AGRON 312 FARM APPRAISALS.
SAME AS AG. EC. 312.
PREREQUISITE--AGRON. 101 AND AG. EC. 220, OR EQUIVALENT.
FIELD TRIPS, ESTIMATED EXPENSE, $7.
5 HOURS, OR 1 UNIT

00570	LECT-DISC	A	8-10	M WTHF	320	M H		REISS AND
		A	1-5	TH	320	M H		OTHERS

COURSES FOR GRADUATES

AGRON 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK TO BE TAKEN IN THE FOLLOWING SUBJECTS--
A-SOILS ALDRICH, BEAVERS, FEHRENBACHER, GIESEKING, JONES, KLUTE, KURTZ, MELSTED, MILLER, ODELL, PETERS, RUNGE, RUSSELL, SABEY, STEVENSON, THORNE, TYNER, WELCH.
B-CROPS ALEXANDER, BROWN, BURGER, CARMER, EARLEY, GERDEMANN, HADLEY, HAGEMAN, HANSON, HITTLE, HOOKER, JACKOBS, LAMBERT, LAUGHNAN, LENG, PATTERSON, PENDLETON, SCOTT, SEIF, SLIFE, WILSON, WOOLLEY.

00588	CONF		ARR					STAFF

AMERICAN CIVILIZATION

MAJOR--STUDENTS WHO ELECT AMERICAN CIVILIZATION AS A MAJOR MUST COMPLETE FORTY SEMESTER HOURS--WHICH SATISFIES BOTH MAJOR AND MINOR REQUIREMENTS FOR GRADUATION--IN COURSES INDICATED BELOW, AT LEAST TWENTY HOURS BEING IN COURSES NUMBERED 300 OR ABOVE. THEY ARE REQUIRED TO MAINTAIN A 3.0 GENERAL AVERAGE AT ALL TIMES, THAT IS, WHEN THE AVERAGE DROPS BELOW THAT LEVEL THE STUDENT SHALL DROP FROM THIS MAJOR. SPECIFICALLY REQUIRED ARE--

1-ENGL. 255-256, HIST. 151-152, AND EITHER ART 317 OR PHIL. 313--A TOTAL OF FIFTEEN HOURS. EQUIVALENT OR MORE ADVANCED COURSES MAY BE SUBSTITUTED PROVIDED THAT, TAKEN TOGETHER, THEY CONSTITUTE COMPREHENSIVE SURVEYS OF THE THREE FIELDS OF AMERICAN HISTORY, AMERICAN LITERATURE, AND EITHER AMERICAN ART OR AMERICAN PHILOSOPHY. APPROVAL FOR ANY SUCH SUBSTITUTION MUST BE REQUESTED BY A PETITION TO THE DEAN BEARING THE RECOMMENDATION OF THE ADVISOR FOR THE CURRICULUM.

2-AT LEAST SIX HOURS OF ADVANCED WORK IN ENGLISH AND AT LEAST SIX HOURS OF ADVANCED WORK IN HISTORY, CHOSEN FROM THE FOLLOWING COURSES ALL OF WHICH ARE IN THE AMERICAN FIELD--ENGL. 285-286, 287, 316, 352, 353-354, 375-376, HIST. 352, 354, 355, 356, 357-358, 359, 360, 361-362, 363-364, 367-368, 369-370, 371-372, 373-374. SPEECH 366 MAY BE SUBSTITUTED FOR ENGL. 316.

3-AT LEAST SIX HOURS FROM THE FOLLOWING COURSES--ARCH. 215-216, ECON 236, ED. 302, GEOG. 223, POL. SCI. 150-151, 351, 381, 397, SPCH. 312, OR COURSES LISTED IN THE PRECEDING PARAGRAPHS, IF NOT COUNTED TOWARD THE REQUIREMENTS THEREUNDER.

4-AT LEAST SIX ADDITIONAL HOURS IN ONE OF THE FOLLOWING DEPARTMENTS-ART, ENGLISH, HISTORY, PHILOSOPHY, OR POLITICAL SCIENCE --CHOSEN FROM COURSES WHICH DEAL WITH NON-AMERICAN ASPECTS OF THE SUBJECT BUT WHICH ARE CLOSELY RELATED TO SPECIFIC COURSES SELECTED UNDER THE PRECEDING REQUIREMENTS, SUCH AS, FOR EXAMPLE, A COURSE DEALING WITH THE SAME PERIOD IN EUROPEAN HISTORY OR IN ENGLISH LITERATURE.

THE COMMITTEE IN CHARGE OF THE CURRICULUM ADVISES EACH STUDENT CONCERNING THESE ADDITIONAL HOURS, ASSUMES RESPONSIBILITY FOR THE STUDENTS REGISTRATION IN THE PROPER COURSES, AND FILES A RECORD OF THE STUDENTS REGISTRATION INDICATING THE SPECIFIC COURSES APPROVED AS SATISFYING THIS REQUIREMENT IN THE OFFICE OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES.

ADVISER--CHAIRMAN OF THE COMMITTEE IN CHARGE--PROFESSOR ROBERT W. JOHANNSEN, 359 ARMORY.

MINORS--THIS CURRICULUM HAS BEEN APPROVED AS A MINOR FOR STUDENTS MAJORING IN GEOGRAPHY, HISTORY, POLITICAL SCIENCE, AND SPEECH. A SPLIT MINOR IS NOT AUTHORIZED. NO COURSE COUNTED TOWARD THE STUDENTS MAJOR MAY BE COUNTED TOWARD THE MINOR. THE MINOR CONSISTS OF AT LEAST TWENTY SEMESTER HOURS, INCLUDING THE REQUIRED COURSES HIST. 151-152 AND ENGL. 113-114, AND IN ADDITION--

1-AT LEAST THREE HOURS FROM COURSES LISTED UNDER -2- OF THE REQUIREMENTS FOR THE MAJOR IN AMERICAN CIVILIZATION, EXCLUDING THOSE NUMBERED UNDER 300 AND THOSE IN THE DEPARTMENT IN WHICH THE STUDENT IS MAJORING.

2-THE REMAINDER, IF ANY, CHOSEN FROM COURSES LISTED UNDER -1- AND -3- OF THE REQUIREMENTS FOR MAJOR IN AMERICAN CIVILIZATION, EXCLUDING THOSE NUMBERED UNDER 300 AND THOSE IN THE DEPARTMENT IN WHICH THE STUDENT IS MAJORING.

ANIMAL SCIENCE

DEPARTMENT OFFICE 328 M H

COURSES FOR ADVANCED UNDERGRADUATES

AN S 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS

00596	LAB	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AN S 305 GENETICS AND ANIMAL IMPROVEMENT.
SAME AS D. S. 305.
PREREQUISITE--AN. S. 110 OR EQUIVALENT.
3 HOURS, OR 3/4 UNIT, SUMMER 1/2 UNIT
FIRST FOUR WEEKS.

00609	LECT-DISC	1-3	MTUWTH	341	A S L	TOUCHBERRY AND DEFRIES

AN S 332 LIVESTOCK MARKETING.
SAME AS AG. EC. 332.
PREREQUISITE--ECON. 108, AG. EC. 230, OR MKTG. 101.
FIELD TRIP, ESTIMATED EXPENSE $10.
3 HOURS, OR 3/4 OR 1 UNIT
FIRST FOUR WEEKS.
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.

00617	LECT-DISC A	*10-12	MTUWTHF	316N M H		BROADBENT

COURSES FOR GRADUATES

AN S 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ZOOL. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*COMBINED CREDIT IN AN.S. 407 AND 408 MAY NOT EXCEED TWO UNITS.
1/2 TO 1 UNIT

00625	LAB	ARR				NALBANDOV

AN S 410 RESEARCH METHODS IN ANIMAL SCIENCE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/4 TO 1 UNIT

00633	CONF		ARR	

AN S INSTRUCTORS-BECKER, BREIDENSTEIN, GARRIGUS, SCOTT AND OTHERS.

AN S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

00641	CONF		ARR	GRADUATE STAI

ANTHROPOLOGY

DEPARTMENT OFFICE 109 D H

MAJOR--TWENTY HOURS IN ANTHROPOLOGY, EXCLUDING ANTH. 102 AND 103. STUDENTS ARE STRONGLY ADVISED TO TAKE AT LEAST ONE COURSE FROM EACH OF THE PRINCIPAL FIELDS OF ANTHROPOLOGY--ARCHAEOLOGY, ETHNOLOGY-INCLUDING AT LEAST ONE COURSE DEALING WITH A PARTICULAR WORLD AREA-LINGUISTICS, AND PHYSICAL ANTHROPOLOGY.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--CLASSICS, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LINGUISTICS, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY AND ZOOLOGY. THE INTERDEPARTMENTAL PROGRAM IN ASIAN STUDIES, LATIN-AMERICAN STUDIES OR IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

ANTH 102 INTRODUCTION TO ANTHROPOLOGY--THE ORIGIN OF MAN AND CULTURE.
*CREDIT IS NOT GIVEN FOR BOTH ANTH. 102 AND SOC. 104.
*4 HOURS

00650	LECT		9-11	M WTH	140 BUR HALL		MCGREGOR
00668	QUIZ	A	10-12	M	209A D H		
00676	QUIZ	B	10-12	TU	109A D H		
00684	QUIZ	C	1-3	W	209A D H		

COURSES FOR ADVANCED UNDERGRADUATES

ANTH 290 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS

00692	CONF	A	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ANTH 353 SOUTHWESTERN ARCHAEOLOGY.
PREREQUISITE--ANTH. 220 OR EQUIVALENT OR CONSENT OF THE INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00705	LECT-DISC	A	2-4	M WTH	109A D H	MCGREGOR

ANTH 354 FIELD TECHNIQUES IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00713	CONF	A	ARR	BAREIS
00721	CONF	B	ARR	ROHN

ANTH 355 LABORATORY TECHNIQUES AND PROBLEMS IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00730	CONF	A	ARR	BAREIS
00748	CONF	B	ARR	ROHN

ANTH 364 FIELD WORK IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED. CONCURRENT REGISTRATION IN ANTH. 365, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00756	CONF	A	ARR	BRUNER
00764	CONF	B	ARR	STAFF

ANTH 365 ANALYSIS OF FIELD DATA IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS, OR 1 UNIT

00772	CONF	A	ARR	BRUNER
00781	CONF	B	ARR	STAFF

COURSES FOR GRADUATES

ANTH 489 READINGS IN ANTHROPOLOGY.
PREREQUISITE--ONE SEMESTER OF GRADUATE WORK IN ANTHROPOLOGY--CONSENT OF ADVISER.
1/2 OR 1 UNIT

00799	CONF	A	ARR	STAFF

ANTH 490 INDIVIDUAL TOPICS IN ANTHROPOLOGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

00801	CONF	A	ARR	STAFF

ANTH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS.

00810	CONF	*A	ARR	STAFF
00828	CONF	*B	ARR	STAFF

ARCHITECTURE

DEPARTMENT OFFICE 106 ARCH

IN THE CURRICULUM IN ARCHITECTURE, NORMAL COURSE PROGRESS IN SEQUENCE IS IMPERATIVE. STUDENTS FAILING TO COMPLETE ANY REQUIRED COURSE MORE THAN ONE SEMESTER LATER THAN THE TIME DESIGNATED IN THE CURRICULUM, ARE PROHIBITED FROM PROGRESSIVE REGISTRATION IN ARCHITECTURAL COURSES UNTIL THE DEFICIENCY IS CORRECTED.

COURSES FOR UNDERGRADUATES

ARCH 131 ARCHITECTURAL DESIGN, II.
PREREQUISITE--ARCH. 101, CREDIT OR REGISTRATION IN G. E. 108, ALSO CREDIT OR REGISTRATION IN ARCH. 141, SOPHOMORE STANDING.
3 HOURS

00836	LAB	9-12	MTUWTHFS	206	F A B	HENDERSON

ARCH 132 ARCHITECTURAL DESIGN, III.
PREREQUISITE--ARCH. 131.
3 HOURS

00844	LAB	9-12	MTUWTHFS	206	F A B	HENDERSON

COURSES FOR ADVANCED UNDERGRADUATES

ARCH 233 ARCHITECTURAL DESIGN, IV.
PREREQUISITE--ARCH. 132, CREDIT OR REGISTRATION IN T.A.M. 150 OR 171 AND REGISTRATION IN ARCH. 241.
3 HOURS

00852	LAB	9-12	MTUWTHFS	206	F A B	LOOKER

ARCH 234 ARCHITECTURAL DESIGN, V.
PREREQUISITE--ARCH. 233.
3 HOURS

00861	LAB	9-12	MTUWTHFS	206	F A B	LOOKER

ARCH 235 ARCHITECTURAL DESIGN, VI.
PREREQUISITE--ARCH. 234.
5 HOURS

00879	LAB	8-12	M W F	206	F A B	KEITH
		1-5	M W F	206	F A B	
		1-4	TU TH	206	F A B	

ARCH 236 ARCHITECTURAL DESIGN, VII.
PREREQUISITE--ARCH. 235 AND 265.
5 HOURS

00887	LAB	8-12	M W F	206	F A B	KEITH
		1-5	M W F	206	F A B	
		1-4	TU TH	206	F A B	

ARCH 241 BUILDING CONSTRUCTION, III.
PREREQUISITE--ARCH. 142. REGISTRATION OR CREDIT IN ARCH. 233.
2 HOURS

00895	LECT	2-4	TU TH	302	ARCH	LANFORD

ARCH 247 STRUCTURAL PLANNING.
PREREQUISITE--ARCH. 257.
3 HOURS

00908	LECT-DISC	10-12	TU TH S	302	ARCH	COY

COURSES FOR GRADUATES

ARCH 491 SPECIAL PROBLEMS IN ARCHITECTURAL CONSTRUCTION.
PREREQUISITE--CREDIT OR REGISTRATION IN ARCH. 481.
1/2 TO 2 UNITS

00916	CONF	ARR				STAFF

ARCH 494 SPECIAL PROBLEMS IN ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 435 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
*ADDITIONAL HOURS TO BE ARRANGED.

00924	LAB	ARR				STAFF

ART

DEPARTMENT OFFICE 143 F A B
COURSES IN ART APPRECIATION AND THE HISTORY OF ART

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 321 TWENTIETH CENTURY ART--1900-1925
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

00932	LECT A	8	MTUWTHFS	62	K M	STAFF

STUDIO COURSES PRIMARILY FOR NON-ART STUDENTS

COURSES FOR UNDERGRADUATES

ART 105 INTRODUCTION TO WATER COLOR PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS CREDIT.
*2 HOURS
00941 LAB A 1-5 M W F 209 F A B SHIPLEY

ART 106 INTRODUCTION TO OIL PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
00959 LAB A 9-1 M W F 9 F A B HOGAN

ART 107 ELEMENTARY DRAWING.
FOR STUDENTS NOT MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
00967 LAB A 1-5 M W F 236 F A B WALLACE

PROFESSIONAL AND STUDIO COURSES

COURSES FOR UNDERGRADUATES

ART 117 DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS
AND IN HOME ECONOMICS OPTION 1.
3 HOURS
00975 LAB A 7-10 MTUWTHFS 236 F A B HULT

ART 118 DRAWING, II.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND
IN HOME ECONOMICS OPTION 1.
PREREQUISITE--ART 117.
2 HOURS
00983 LAB A 8-10 MTUWTHFS 240 F A B HULT

ART 119 DESIGN, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS
AND IN HOME ECONOMICS OPTION 1.
2 HOURS
00991 LAB A 10-12 MTUWTHFS 319 F A B STERKEL

ART 120 DESIGN, II.
OPEN ONLY TO STUDENTS IN COLLEGE OF FINE AND APPLIED ARTS AND IN
HOME ECONOMICS OPTION 1.
PREREQUISITE--ART 119.
3 HOURS
01006 LAB A 10-1 MTUWTHFS 319 F A B STERKEL

ART 125 LIFE DRAWING, I.
PREREQUISITE--ART 118.
2 HOURS
01014 LAB A 2-5 TUWTHF 336 F A B ZIROLI

ART 126 LIFE DRAWING, II.
PREREQUISITE--ART 125.
2 HOURS
01022 LAB A 2-5 TUWTHF 336 F A B ZIROLI

ART 131 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 118, 120, 122.
2 HOURS
01031 LAB A 9-1 TU TH S 209 F A B FOSTER

ART 132 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 131.
2 HOURS

01049	LAB	A	9-1	TU TH S	209	F A B		FOSTER

ART 141 STILL LIFE, I.
PREREQUISITE--ART 118, 120, 122.
2 HOURS

01057	LAB	A	9-1	M W F	9	F A B		HOGAN

ART 142 STILL LIFE, II.
PREREQUISITE--ART 141.
2 HOURS

01065	LAB	A	9-1	M W F	9	F A B		HOGAN

ART 151 SCULPTURE, I.
PREREQUISITE--ART 118, 120, 122 OR ARCH. 234.
2 HOURS

01073	LAB	A	9-1	TU TH S	25	F A B		TASCH

ART 152 SCULPTURE, II.
PREREQUISITE--ART 151.
2 HOURS

01081	LAB	A	9-1	TU TH S	25	F A B		TASCH

ART 181 FREEHAND DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS.
2 HOURS

01090	LAB	A	1-5	M W F	236	F A B		WALLACE

ART 182 FREEHAND DRAWING, II.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS.
PREREQUISITE--ART 181.
2 HOURS

01102	LAB	A	1-5	M W F	236	F A B		WALLACE

ART 183 FREEHAND DRAWING, III.
PREREQUISITE--ART 182. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS

01111	LAB	A	1-5	M W F	311	F A B		FAGAN

ART 184 FREEHAND DRAWING, IV.
PREREQUISITE--ART 183. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS

01129	LAB	A	1-5	M W F	311	F A B		FAGAN

ART 190 RECREATIONAL CRAFTS, I.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

01137	LAB	A	2-5	TUWTHF	107	F A B		BREEN

ART 191 RECREATIONAL CRAFTS, II.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
PREREQUISITE--ART 190.
2 HOURS

01145	LAB	A	2-5	TUWTHF	107	F A B		BREEN

ART 194 POTTERY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

01153	LAB	A	9-1	M W F	152	N E L		FRITH

ART 195 POTTERY, II.
PREREQUISITE--ART 194.
2 HOURS

01161	LAB	A	9-1	M W F	152	N E L		FRITH

ART 201 WATER COLOR, III.
PREREQUISITE--ART 118 AND 120.
2 HOURS

01170	LAB	A	1-5	M W F	209	F A B		SHIPLEY

ART 202 WATER COLOR, IV.
PREREQUISITE--ART 201.
2 HOURS

01188	LAB	A	1-5	M W F	209	F A B		SHIPLEY

ART 203 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS

01196	LAB	A	2-5	TUWTHF	106	F A B		BREEN

ART 204 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS

01209	LAB	A	2-5	TUWTHF	106	F A B		BREEN

ART 225 INTERMEDIATE DRAWING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS

01217	LAB	A	2-5	TUWTHF	336	F A B		ZIROLI

ART 226 INTERMEDIATE DRAWING, II.
PREREQUISITE--ART 225.
2 HOURS

01225	LAB	A	2-5	TUWTHF	336	F A B		ZIROLI

ART 231 INTERMEDIATE COMPOSITION, I.
PREREQUISITE--ART 132.
3 HOURS

01233	LAB	A	9-1	M W F	318	F A B		BRIGGS
		A	9-12	TU TH	318	F A B		

ART 232 INTERMEDIATE COMPOSITION, II.
PREREQUISITE--ART 231.
3 HOURS

01241	LAB	A	9-1	M W F	318	F A B		BRIGGS
		A	9-12	TU TH	318	F A B		BRIGGS

ART 243 FIGURE PAINTING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS

01250	LAB	A	9-1	M W F	324	F A B		BRIGGS

ART 244 FIGURE PAINTING, II.
PREREQUISITE--ART 243.
2 HOURS

01268	LAB	A	9-1	M W F	324	F A B		BRIGGS

ART 251 ADVANCED SCULPTURE, I.
PREREQUISITE--ART 152.
2 HOURS

01276	LAB	A	9-1	TU TH S	25	F A B		TASCH

ART 252 ADVANCED SCULPTURE, II.
PREREQUISITE--ART 251.
2 HOURS

01284	LAB	A	9-1	TU TH S	25	F A B		TASCH

ART 261 LAYOUT AND LETTERING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

01292	LAB	A	9-12	MTUWTHFS	311	F A B		BRANDES

ART 262 LAYOUT AND LETTERING, II.
PREREQUISITE--JUNIOR STANDING IN ART.
3 HOURS

01305	LAB	A	9-12	MTUWTHFS	311	F A B	BRANDES

ART 265 GRAPHIC DESIGN, I.
PREREQUISITE--ART 161 AND 162 FOR GRAPHIC DESIGN MAJORS--JUNIOR STANDING IN ART OR CONSENT OF INSTRUCTOR FOR OTHERS.
3 HOURS

01313	LAB	A	9-12	MTUWTHFS	311	F A B	BRANDES

ART 266 GRAPHIC DESIGN, II.
PREREQUISITE--ART 265.
3 HOURS

01321	LAB	A	9-12	MTUWTHFS	311	F A B	BRANDES

ART 281 FREEHAND DRAWING, V.
PREREQUISITE--ART 184.
2 HOURS

01330	LAB	A	1-5	M W F	311	F A B	FAGAN

ART 282 FREEHAND DRAWING, VI.
PREREQUISITE--ART 281.
2 HOURS

01348	LAB	A	1-5	M W F	311	F A B	FAGAN

ART 283 PRINTMAKING, I.
PREREQUISITE--JUNIOR STANDING IN ART OR CONSENT OF INSTRUCTOR.
2 HOURS

01356	LAB	A	2-5	TUWTHF	GRAD STUDIO		HEULER

ART 284 PRINTMAKING, II.
PREREQUISITE--ART 283.
2 HOURS

01364	LAB	A	2-5	TUWTHF	GRAD STUDIO		HEULER

ART 294 CERAMIC DESIGN, I.
PREREQUISITE--JUNIOR STANDING IN CURRICULUM IN CRAFTS.
3 HOURS
*SIX HOURS TO BE ARRANGED.

01372	LAB	A	*9-1	M W F	152	N E L	FRITH

ART 295 CERAMIC DESIGN, II.
PREREQUISITE--ART 294.
3 HOURS
*SIX HOURS TO BE ARRANGED.

01381	LAB	A	*9-1	M W F	152	N E L	FRITH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 332 DRAWING.
PREREQUISITE--ART 126 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE.
2 HOURS, OR 1/2 TO 1 UNIT

01399	LAB	A	2-5	TUWTHF	338	F A B	ZIROLI

ART 333 PAINTING.
PREREQUISITE--ART 142 OR EQUIVALENT, FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M. F. A. IN PAINTING.
*COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS.
*2 TO 4 HOURS, OR 1/2 TO 1 UNIT

01401	LAB	A	9-1	M W F	308	F A B	BRIGGS

ART 351 ADVANCED SCULPTURE TECHNIQUES.
PREREQUISITE--ART 252 OR EQUIVALENT.
2 HOURS, OR 1/2 TO 1 UNIT

01410	LAB	A	9-1	TU TH S	25	F A B	TASCH

ART 383 PRINT MEDIA.
PREREQUISITE--ART 284 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M.F.A. IN PAINTING.
2 HOURS, OR 1/2 TO 1 UNIT

01428	LAB	A	2-5	TUWTHF	GRAD	STUDIO	HEULER

ART 394 CERAMIC DESIGN.
PREREQUISITE--ART 295 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 TO 2 UNITS

01436	LAB	A	9-1	M W F	152	N E L	FRITH

COURSES FOR GRADUATES

ART 491 SPECIAL PROBLEMS.
1/2 TO 2 UNITS

01444	LAB	A	ARR		GRAD	STUDIO	DOOLITTLE
01452	LAB	B	ARR		140	F A B	STAFF

ART 493 SEMINAR.
1 UNIT

01461	LECT-DISC	A	ARR		140	F A B	STAFF

ART 495 PAINTING LABORATORY.
1/2 TO 2 UNITS

01479	LAB	A	2-5	MTUWTH	GRAD	STUDIO	DOOLITTLE

ASIAN STUDIES

DEPARTMENT OFFICE ROOM 316 1207 W OREGON

STUDENTS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF EAST, SOUTHEAST, SOUTH, AND MIDDLE EAST ASIAN AFFAIRS AND CULTURES ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR AND FACULTY MEMBERS OF THE CENTER FOR ASIAN STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. THE CENTER IS DESIGNATED A NATIONAL DEFENSE EDUCATION ACT-N.D.E.A.-LANGUAGE AND AREA STUDIES CENTER. THE DIRECTOR IS PROFESSOR SOLOMON B. LEVINE, ROOM 316, 1207 WEST OREGON, URBANA.

BELOW ARE LISTED COURSES IN THE ASIAN STUDIES AREAS WHICH ARE BEING OFFERED THIS TERM. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.
HIST. 441

DURING THE SUMMER OF 1966, THE COMMITTEE ON INSTITUTIONAL COOPERATION WILL HOLD THE 4TH CIC FAR EASTERN LANGUAGE INSTITUTE, AT WHICH QUALIFIED UNIVERSITY OF ILLINOIS STUDENTS ARE ELIGIBLE TO TAKE INTENSIVE COURSES IN CHINESE AND JAPANESE FOR APPROPRIATE CREDIT AS PART OF THE U OF I SUMMER SESSION OFFERINGS. COURSES IN CHINESE AND JAPANESE WILL BE OFFERED AT THE ELEMENTARY, INTERMEDIATE, AND ADVANCED LEVELS. FOR FURTHER INFORMATION ABOUT THESE COURSES AND THE CIC INSTITUTE IN GENERAL, STUDENTS OR FACULTY ADVISERS SHOULD CONTACT THE CENTER FOR ASIAN STUDIES, 1207 W. OREGON, URBANA, ILLINOIS, 333-4850.

ASTRONOMY

DEPARTMENT OFFICE 108A OBSERV

MAJOR--TWENTY HOURS IN ASTRONOMY.

MINOR--TWENTY HOURS WHICH MUST INCLUDE PHYSICS 106, 107, AND 108. THE REMAINING EIGHT HOURS MAY BE TAKEN IN PHYSICS OR IN ONE OF THE FOLLOWING SUBJECTS--CHEMISTRY, GEOLOGY, MATHEMATICS, PHILOSOPHY. IF TWO SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

INDIVIDUAL INSTRUCTION IS PROVIDED FOR SUPERIOR UNDERGRADUATE STUDENTS AT HOURS TO BE ARRANGED.

COURSES FOR GRADUATES

ASTR 499 THESIS RESEARCH
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
01487 CONF ARR STAFF

AVIATION

DEPARTMENT OFFICE 318 E H

COURSES OFFERED BY THE INSTITUTE OF AVIATION ARE OPEN TO STUDENTS AND FACULTY IN ALL DEPARTMENTS OF THE UNIVERSITY, SUBJECT TO LIMITATIONS IMPOSED BY THE AVAILABILITY OF SPACE AND EQUIPMENT. CREDIT FOR INSTITUTE OF AVIATION COURSES IS GENERAL UNIVERSITY CREDIT. HOWEVER, ITS USE AS CREDIT TOWARD GRADUATION IS A MATTER FOR EACH COLLEGE TO PASS UPON.

THE FEE FOR EACH INSTITUTE OF AVIATION FLIGHT COURSE IS $375. ARRANGEMENTS FOR THE PHYSICAL EXAMINATION FOR STUDENTS IN AVI. 101 ARE MADE BY THE INSTITUTE THROUGH THE UNIVERSITY HEALTH SERVICE UPON FINAL ACCEPTANCE IN THE PRIVATE PILOT COURSE AT REGISTRATION TIME. STUDENTS IN AVI. 104 ARE REQUIRED TO POSSESS A CURRENT SECOND CLASS F.A.A. MEDICAL CERTIFICATE AT THE TIME OF REGISTRATION

BUS TRANSPORTATION BETWEEN THE CAMPUS AND AIRPORT IS PROVIDED FREE OF CHARGE TO ALL STUDENTS REGISTERED IN AVIATION COURSES. THE DAILY BUS SCHEDULE, WITH ROUTINGS, IS LISTED SEPARATELY IMMEDIATELY FOLLOWING THE FLIGHT COURSES. STUDENTS MAY PROVIDE THEIR OWN TRANSPORTATION IF THEY WISH.

STUDENTS ARE CAUTIONED THAT ALL TIMES LISTED IN THE FOLLOWING FLIGHT SCHEDULES REFER TO AIRBORNE TIME AND THAT A MINIMUM OF 30 MINUTES MUST BE ALLOWED FOR TRAVELING TO THE AIRPORT PRIOR TO EACH FLIGHT AND FOR RETURNING TO THE CAMPUS AFTER EACH FLIGHT.

COURSES FOR UNDERGRADUATES

IN SOME CASES TWO OR MORE FLIGHT COURSES MAY BE TAKEN CONCURRENTLY BY SPECIAL PERMISSION.

AVI 101 PRIVATE PILOT.
3 HOURS

01495	LECT-DISC	A	9	MTUWTHF	423	E H	BENN
01508	LECT-DISC	B	3	MTUWTHF	423	E H	MOELLER
01516	FLT	F1	8	MTUWTHFS		AIRPORT	BENN AND STAFF
01524	FLT	F2	920-1020	MTUWTHFS		AIRPORT	
01532	FLT	F3	1040-1140	MTUWTHFS		AIRPORT	
01541	FLT	F4	1220-120	MTUWTHF		AIRPORT	
01559	FLT	F5	140-240	MTUWTHF		AIRPORT	
01567	FLT	F6	3	MTUWTHF		AIRPORT	
01575	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 102 SECONDARY FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

01583	LECT-DISC		10	MTUWTHF	423	E H	BENN
01591	FLT	F1	8	MTUWTHFS		AIRPORT	GORDON
01604	FLT	F4	1220-120	MTUWTHF		AIRPORT	AND STAFF
01612	FLT	F5	140-240	MTUWTHF		AIRPORT	
01621	FLT	F6	3	MTUWTHF		AIRPORT	
01639	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 103 INTERMEDIATE FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

01647	LECT-DISC		12	MTUWTHF	423	E H	HAAK
01655	FLT	X1	745-1130	M TH		AIRPORT	GORDON AND
01663	FLT	X2	140-540	M TH		AIRPORT	STAFF
01671	FLT	X3	745-1130	TU F		AIRPORT	
01680	FLT	X4	140-540	TU F		AIRPORT	
01698	FLT	X5	745-1130	W S		AIRPORT	

AVI 104 ADVANCED FLIGHT.
PREREQUISITE--AVI. 102 AND 103, CONSENT OF DIRECTOR.
3 HOURS

01701	LECT-DISC	A	11	MTUWTHF	423	E H	HAAK
01719	LECT-DISC	B	1	MTUWTHF	423	E H	MOELLER
01727	FLT	F1	8	MTUWTHFS		AIRPORT	GORDON AND
01735	FLT	F2	920-1020	MTUWTHFS		AIRPORT	STAFF
01743	FLT	F3	1040-1140	MTUWTHFS		AIRPORT	
01751	FLT	F4	1220-120	MTUWTHF		AIRPORT	
01760	FLT	F5	140-240	MTUWTHF		AIRPORT	
01778	FLT	F6	3	MTUWTHF		AIRPORT	
01786	FLT	F7	430-530	MTUWTHF		AIRPORT	

COURSES FOR ADVANCED UNDERGRADUATES

AVI 205 FLIGHT INSTRUCTOR.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

01794	LECT-DISC		10	MTUWTHF	421	E H	MOELLER
01807	FLT	F1	8	MTUWTHFS		AIRPORT	ANDERSON
01815	FLT	F4	1220-120	MTUWTHF		AIRPORT	AND STAFF
01823	FLT	F5	140-240	MTUWTHF		AIRPORT	
01831	FLT	F6	3	MTUWTHF		AIRPORT	
01840	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 206 BASIC INSTRUMENT FLIGHT TECHNIQUES.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, OR EQUIVALENT FLIGHT EXPERIENCE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

01858	LECT-DISC		11	MTUWTHF	421	E H	MOELLER
01866	FLT	F1	8	MTUWTHFS		AIRPORT	ANDERSON
01874	FLT	F2	920-1020	MTUWTHFS		AIRPORT	AND STAFF
01882	FLT	F4	1220-120	MTUWTHF		AIRPORT	
01891	FLT	F5	140-240	MTUWTHF		AIRPORT	
01903	FLT	F6	3	MTUWTHF		AIRPORT	
01911	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 207 ADVANCED INSTRUMENT FLIGHT PROCEDURES.
PREREQUISITE--AVI. 206 OR 40 HOURS OF SIMULATED INSTRUMENT FLIGHT EXPERIENCE, JUNIOR STANDING CONSENT OF DIRECTOR.
3 HOURS

01920	LECT-DISC		755-855	MTUWTHF	423	E H	HAAK
01938	FLT	F2	920-1020	MTUWTHFS		AIRPORT	ANDERSON
01946	FLT	F3	1040-1140	MTUWTHFS		AIRPORT	AND STAFF
01954	FLT	F4	1220-120	MTUWTHF		AIRPORT	
01962	FLT	F5	140-240	MTUWTHF		AIRPORT	
01971	FLT	F6	3	MTUWTHF		AIRPORT	
01989	FLT	F7	430-530	MTUWTHF		AIRPORT	

AVI 292 SPECIAL RATING--MULTI-ENGINE LAND.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, CONSENT OF DIRECTOR.
1 HOUR

01997	DISC		ARR		AIRPORT	STONECIPHER
02001	FLT	F1	8	MTUWTHFS	AIRPORT	AND STAFF
02010	FLT	F2	920-1020	MTUWTHFS	AIRPORT	
02028	FLT	F3	1040-1140	MTUWTHFS	AIRPORT	
02036	FLT	F4	1220-120	MTUWTHF	AIRPORT	
02044	FLT	F5	140-240	MTUWTHF	AIRPORT	
02052	FLT	F6	3	MTUWTHF	AIRPORT	
02061	FLT	F7	430-530	MTUWTHF	AIRPORT	

BUS SCHEDULE AND ROUTE

THE INSTITUTE OF AVIATION BUS MAKES REGULAR TRIPS BETWEEN THE AIRPORT AND THE CAMPUS BEGINNING ON THE FIRST DAY OF CLASSES AND CONTINUING THROUGH THE LAST DAY OF FINAL EXAMINATIONS.
ON THE FIRST TRIP TO THE CAMPUS EACH MORNING THE BUS IS ROUTED VIA THE ORCHARD DOWNS HOUSING UNITS AND THE PENNSYLVANIA AVENUE RESIDENCE HALLS.
THE BUS LEAVES FROM THE CAMPUS PARKING LOCATION AT THE NORTH EAST CORNER OF AERO LAB B, AND MAKES REGULAR STOPS ON THE WAY TO THE AIRPORT AT THE CORNERS OF SIXTH AND ARMORY STREETS, FOURTH STREET AND GREGORY DRIVE, AND FIRST STREET AND GREGORY DRIVE. THE TRIP FROM THE AIRPORT BACK TO THE CAMPUS IS VIA GREGORY DRIVE AND GOODWIN AVENUE TO THE PARKING LOCATION.
THE SCHEDULE IS AS FOLLOWS--

MONDAY-WEDNESDAY-FRIDAY

LEAVE CAMPUS-ARRIVE AIRPORT			LEAVE AIRPORT-ARRIVE CAMPUS		
SECT.			SECT.		
A1	7 30	8.00	C1	8.30	9.00
A2	9.00	9.30	C2	9.30	10.00
A3	10.00	10.30	C3	11.00	11.30
A4	12.00	12.30	C4	12.30	1.00
A5	1.00	1.30	C5	1.30	2.00
A6	2.00	2.30	C6	2.30	3.00
A7	3.00	3.30	C7	3.30	4.00
A8	4.00	4.30	C8	5.00	5.30

TUESDAY-THURSDAY-SATURDAY

SECT.			SECT.		
A10	7.30	8.00	C9	8.30	9.00
A11	9.00	9.30	C10	9.30	10.00
A12	10.00	10.30	C11	11.00	11.30
A13	12.00	12.30	*C12	12.30	1.00
*A14	1.00	1.30	C13	1.30	2.00
A15	2.00	2.30	C14	2.30	3.00
A16	3.00	3.30	C15	3.30	4.00
A17	4.00	4.30	C16	5.30	6.00

*DENOTES LAST TRIP ON SATURDAYS.

AVIATION
AIRCRAFT MAINTENANCE

COURSES FOR UNDERGRADUATES

AVI 161 AIRPORT SHOP MANAGEMENT.
3 HOURS

02079	LECT-DISC	920-1010	MTUWTHF	AIRPORT	BAILEY

AVI 168 PROBLEMS OF AIRCRAFT MAINTENANCE.
PREREQUISITE--SOPHOMORE STANDING.
2 HOURS

02087	LECT-DISC	8-10	TU F	AIRPORT	APPLEGATE

BANDS

DEPARTMENT OFFICE 140 BAND

THE SUMMER SESSION BAND IS OPEN TO STUDENTS WHO HAVE BEEN MEMBERS OF THE UNIVERSITY BANDS DURING THE ACADEMIC YEAR, AND TO OTHER STUDENTS, BOTH MEN AND WOMEN, WHO MAY QUALIFY BY PLAYING EXAMINATION. FINAL SELECTION OF MEMBERSHIP IS BY INSTRUMENTATION AND PROFICIENCY. CANDIDATES SHOULD REPORT TO THE BANDS OFFICE, 140 BAND BUILDING, DURING THE REGISTRATION PERIOD FOR ENROLLMENT AND/OR APPOINTMENTS FOR AUDITIONS. REHEARSALS WILL BE HELD FROM 7.15 TO 8.45 P.M. MONDAY AND WEDNESDAY IN ROOM 141, BAND BUILDING, AND A SERIES OF TWILIGHT CONCERTS WILL BE SCHEDULED. CONDUCTOR--MR. GUY DUKER

02095	PRACT	715-845PM	M W	BAND	

BIOLOGY

DEPARTMENT OFFICE 131 BUR HALL

COURSES FOR GRADUATES

BIOL 490 SPECIAL TOPICS IN BIOLOGY.
0 TO 1 UNIT

02108	CONF	ARR			STAFF

BIOL 499 THESIS RESEARCH.
0 TO 4 UNITS

02116	CONF	ARR			STAFF

BIOPHYSICS

DEPARTMENT OFFICE 524 BUR HALL

COURSES FOR GRADUATES

BIOPH 410 SPECIAL TOPICS IN BIOPHYSICS.
PREREQUISITE--BIOPH. 401 OR EQUIVALENT, BIOPH. 402 AND 403.
1/2 TO 1 UNIT

02124	CONF	ARR	STAFF

BIOPH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

02132	CONF	ARR	STAFF

BOTANY

DEPARTMENT OFFICE 208 N H B

MAJOR--TWENTY HOURS OF BOTANY EXCLUDING BOTANY 100, 101, D.G.S. 131, AND 132, BUT INCLUDING BOT. 160, 302,303, AND 330 OR THEIR EQUIVALENT. THE BALANCE OF THE MINIMUM OF TWENTY HOURS MUST BE TAKEN IN OTHER 300 LEVEL COURSES. BOT. 210 AND 381 ARE STRONGLY RECOMMENDED. IN ADDITION ONE SEMESTER EACH OF ORGANIC CHEMISTRY, PHYSICS AND ZOOLOGY WILL BE REQUIRED. ONE ADDITIONAL SEMESTER OF PHYSICAL SCIENCE IS ALSO REQUIRED, BUT THIS MAY BE SELECTED FROM COURSES IN PHYSICS OR GEOLOGY. CREDIT NOT TO EXCEED TWO HOURS IN BIOL. 203 AND 204 MAY BE INCLUDED IN THE TWENTY HOURS OF CREDIT FOR THE MAJOR.

MINORS--TWENTY HOURS IN ONE OR TWO SUBJECTS CHOSEN IN CONSULTATION WITH THE CHAIRMAN OF THE DEPARTMENT FROM THE FOLLOWING--AGRONOMY, CHEMISTRY, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, HORTICULTURE, MATHEMATICS, MICROBIOLOGY, PHYSICS, PHYSIOLOGY, PLANT PATHOLOGY, AND ZOOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

IF HORTICULTURE IS CHOSEN AS A MINOR, NOT MORE THAN TEN HOURS MAY BE COUNTED. THE TEN HOURS MAY BE CHOSEN FROM HORT. 100, 110, 121, 201, 230 OR 233, 242, 262, 307 OR 308, 321 OR 322, 367, AND 382.

NOTE--ATTENTION IS CALLED TO ADDITIONAL COURSE OFFERINGS LISTED UNDER BIOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

BOT 210 GENETICS.
SAME AS ZOOL. 210
PREREQUISITE--BOT. 100 AND ZOOL. 101 OR CONSENT OF INSTRUCTOR.
4 HOURS

02141	LECT	2	MTUWTHF	140	BUR HALL	BADER
	LAB-DISC	3	MTUWTHF	102	H H	BADER & STAFF

BOT 293 HONORS.
PREREQUISITE--FIFTEEN HOURS OF BOTANY, SENIOR STANDING.
2 HOURS

02159	CONF &	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
BOT   300     INDIVIDUAL TOPICS.
         PREREQUISITE--BOT. 100, TEN HOURS OF ADVANCED WORK IN BOTANY OR
         ANOTHER BIOLOGICAL SCIENCE, SENIOR STANDING.
         *GRADUATE STUDENTS MAY OFFER 1 UNIT TOWARD M. S.
         *2 TO 5 HOURS, OR 1/4 OR 1/2 UNIT
       02167      CONF              ARR                                        STAFF

BOT   304     GENERAL PLANT MORPHOLOGY.
         PREREQUISITE--BOT. 100 OR D.G.S. 131 AND 132, OR EQUIVALENT, SENIOR
         STANDING OR CONSENT OF INSTRUCTOR.
         *CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN BOT 302 OR BOT 303.
         *3 OR 5 HOURS, OR 1/2 OR 1 UNIT
       02175      LAB-DISC            8-10     MTUWTHFS   201  H H            M. BALBACH

BOT   366     FIELD BOTANY.
         PREREQUISITE--ONE COURSE IN BOTANY, CONSENT OF INSTRUCTOR.
         3 OR 5 HOURS, OR 1/2 OR 1 UNIT
         *FIELD WORK TWO HOURS TO BE ARRANGED.
       02183      LAB-DISC            *1-3     MTUW       258  N H B          PAYNE
                                      1-5         TH      258  N H B

BOT   381     PLANT ECOLOGY.
         PREREQUISITE--BOT. 160 OR EQUIVALENT.
         FIELD TRIPS.
         5 HOURS, OR 1 UNIT
       02191      LECT-DISC           9        MTUWTHF    136  BUR HALL       H. BALBACH
                  LAB                 8-4             S        ARR
```

COURSES FOR GRADUATES

```
BOT   493     ADVANCED STUDIES IN BOTANY.
         * NOT MORE THAN 1 UNIT MAY BE APPLIED TOWARD THE GRADUATE
         COLLEGE M.S. DEGREE REQUIREMENT OF 3 UNITS OF COURSE WORK.
         *1/2 TO 2 UNITS
         WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--
              A--ANATOMY                          CAROTHERS, PAOLILLO
              B--BRYOLOGY                         JONES
              C--CYTOGENETICS                     STEFFENSEN
              D--CYTOLOGY                         STEFFENSEN
              E--ECOLOGY                          BLISS
              F--GENETICS                         LAUGHNAN
              G--MORPHOGENESIS                    PAOLILLO
              H--MORPHOLOGY                       CAROTHERS, PHILLIPS,
                                                  AND STEWART
              I--MYCOLOGY                         ROGERS
              J--PALEOBOTANY                      PHILLIPS, STEWART
              K--PHOTOSYNTHESIS                   GOVINDJEE, RABINOWITCH
              L--PHYCOLOGY                        HOFFMAN
              M--PHYSIOLOGY                       HANSON, NANCE
              N--TAXONOMY                         JONES, PAYNE
              O--ULTRASTRUCTURE                   CAROTHERS, HOFFMAN,
                                                  AND PAOLILLO
              P--VIROLOGY                         BLACK, REICHMANN
       02204      LAB               ARR                                        STAFF

BOT   499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
       02212      LAB               ARR                                        STAFF
```

BUSINESS

DEPARTMENT OFFICE 360 COM W

COURSES FOR GRADUATES

```
BUS   499     THESIS RESEARCH
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
       02221      CONF              1-3         W       120  COM W           DEMARIS
```

BUSINESS ADMINISTRATION

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION--320 COM W

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ADM 373 ELECTRONIC DATA PROCESSING FOR BUSINESS.
PREREQUISITE--ECON. 170, ACCY. 106 OR 108.
3 HOURS, OR 1/2 OR 1 UNIT

02239	LECT-DISC A	8-940	M W F	245	COM W

COURSES FOR GRADUATES

B ADM 511 BUSINESS ORGANIZATION.
PREREQUISITE--B. ADM. 510.
3/4 UNIT

02247	DISC	8-10	MTU THF	241	COM W

B ADM 531 INTRODUCTION TO PRODUCTION.
PREREQUISITE--FIRST SEMESTER OF THE M. B. A. PROGRAM.
3/4 UNIT

02255	DISC	1-3	MTU THF	236	COM W

B ADM 544 EXECUTIVE POLICIES AND PLANNING.
PREREQUISITE--FIRST YEAR MASTER OF BUSINESS ADMINISTRATION COURSES OR EQUIVALENT.
1 UNIT

02263	DISC	1-3	MTU THF	241	COM W

B ADM 545 BUSINESS LOGISTICS.
PREREQUISITE--SECOND YEAR M.B.A. STANDING OR CONSENT OF INSTRUCTOR.
3/4 UNIT

02271	DISC	10-12	MTU THF	236	COM W

B ADM 551 FINANCIAL ANALYSIS.
PREREQUISITE--ENROLLMENT IN THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT

02280	DISC	10-12	MTU THF	241	COM W

B ADM 583 INTERNATIONAL BUSINESS OPERATIONS, II.
PREREQUISITE--B. ADM. 582.
3/4 UNIT

02298	DISC	3-5	MTU THF	241	COM W

B ADM 590 INDEPENDENT STUDY AND RESEARCH.
1/2 OR 1 UNIT

02301	CONF	8-12	W	241	COM W

B ADM 599 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

02319	CONF	1-5	W	241	COM W

BUSINESS EDUCATION

DEPARTMENT OFFICE 117 D K H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ED 351 IMPROVEMENT OF INSTRUCTION IN SHORTHAND.
PREREQUISITE--SIXTEEN HOURS IN COMMERCE, INCLUDING B. ED. 112--SIXTEEN HOURS IN EDUCATION, INCLUDING ED. PR. 242.
2 HOURS, OR 1/2 UNIT

02327	LECT-DISC	C	10	TUWTHF	15	D K H	MAHAFFEY

B ED 361 TEACHING OFFICE MANAGEMENT AND MACHINE OPERATIONS.
PREREQUISITE--SE. ED. 241, ED. PR. 242, SIXTEEN HOURS IN COMMERCE SIX OF WHICH MUST BE IN ACCOUNTING, ONE YEAR TEACHING EXPERIENCE.
2 HOURS, OR 1/2 UNIT

02335	LECT	B	9	TUWTHF	8	D K H	MELSON
	LAB	B	1-3	TUWTHF	8	D K H	MELSON

B ED 383 PROBLEMS IN COOPERATIVE EDUCATION.
PREREQUISITE--SIXTEEN HOURS IN EDUCATION AND SIXTEEN IN COMMERCE, AND CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT
THIS IS AN EXTRAMURAL COURSE--PROBLEMS IN COOPERATIVE EDUCATION. STUDENTS APPLY FOR AND SECURE DISTRIBUTIVE OR OFFICE POSITIONS WITH SELECTED COOPERATING BUSINESS FIRMS. WHILE REGULARLY EMPLOYED IN THESE SUPERVISED POSITIONS, THEY OBSERVE THE RELATIONSHIPS BETWEEN THOSE ACTIVITIES AND THE COOPERATIVE BUSINESS EDUCATION PROGRAMS IN THE HIGH SCHOOL. THESE RELATIONSHIPS ARE POINTED UP THROUGH WORKSHOP SESSIONS WHERE EMPHASIS IS PLACED ON JOB ANALYSIS, CURRENT TRENDS, WAGE AND BENEFIT STRUCTURE, PERSONNEL PRACTICES, AND LABOR RELATIONS. THESE WORKSHOP SESSIONS MEET DURING THE FIRST AND LAST WEEK OF THE SUMMER SESSION IN THE INDICATED ROOM.

02343	LECT-DISC		1-5	MTUWTHF	30	COM W	STAFF

COURSES FOR GRADUATES

B ED 490 SPECIAL TOPICS.
*CREDIT CANNOT BE APPLIED TO A DEGREE IF A THESIS IS SUBMITTED.
*1/2 OR 1 UNIT

02351	CONF		ARR			D K H	

B ED 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN BUSINESS EDUCATION.
1/2 TO 2 UNITS

02360	CONF		ARR			D K H	

CERAMIC ENGINEERING

DEPARTMENT OFFICE 203 CER

COURSES FOR ADVANCED UNDERGRADUATES

CER E 299 THESIS.
1 TO 3 HOURS

02378	CONF		ARR				

CER E 495 MATERIALS AND SPECIAL PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 2 UNITS
02386 LAB-DISC ARR
INSTRUCTORS-ALLEN, BERGERON, COOK, FRIEDBERG, NELSON, TENNERY, TOOLEY

CER E 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
02394 CONF ARR
INSTRUCTORS-ALLEN, BERGERON, COOK, FRIEDBERG, NELSON, TENNERY, TOOLEY

CHEMISTRY AND CHEMICAL ENGINEERING

DEPARTMENT OFFICE 108 N L

MAJOR--NOT LESS THAN TWENTY HOURS IN CHEMISTRY, EXCLUDING CHEMISTRY 101, 102, 104, 105, 107, 108, 109, 111. ONE SEMESTER OF BASIC WORK IN EACH OF THE FOLLOWING AREAS MUST BE INCLUDED--ANALYTICAL, ORGANIC, AND PHYSICAL. A STUDENT WHO HAS TAKEN 108 MAY SUBSTITUTE ANY ADDITIONAL COURSE WITH LABORATORY FOR THE ANALYTICAL COURSE. IN ADDITION, THERE MUST BE INCLUDED TWO APPROVED 300-LEVEL COURSES, ONE IN EACH OF TWO AREAS OF CHEMISTRY. THESE TWO COURSES MUST HAVE THE APPROVAL OF THE DEPARTMENTAL ADVISER. IT IS VERY DESIRABLE THAT THE STUDENT PLAN HIS COURSE WORK AS EARLY AS POSSIBLE IN CONSULTATION WITH HIS ADVISER.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--BOTANY, CERAMIC ENGINEERING, ENTOMOLOGY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHILOSOPHY, PHYSICS, PHYSIOLOGY, PSYCHOLOGY, AND ZOOLOGY. WITH THE WRITTEN APPROVAL OF THE DEPARTMENTAL ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED.

DEPARTMENTAL DISTINCTION--STUDENTS IN CHEMISTRY REGISTERED IN CHEM. 290--THESIS--OR STUDENTS IN CHEMICAL ENGINEERING REGISTERED IN CH. E. 290--THESIS--OR 379--PROJECTS--OR 381--PLANT DESIGN--BECOME CANDIDATES FOR DEPARTMENTAL DISTINCTION. ALL STUDENTS ARE ELIGIBLE FOR COLLEGE HONORS WHO HAVE A 4.0 AVERAGE OR BETTER. THE LEVEL OF DISTINCTION TO BE RECOMMENDED IS DETERMINED BY THE QUALITY OF THE SPECIAL WORK DONE IN ADDITION TO THE REQUIREMENT THAT THE OVER-ALL GRADE-POINT AVERAGES, EXCLUSIVE OF MILITARY TRAINING AND PHYSICAL EDUCATION, OF A 4.0, 4.25, AND 4.5 ARE REQUIRED FOR THE CITATIONS OF DISTINCTION, HIGH DISTINCTION, AND HIGHEST DISTINCTION, RESPECTIVELY. RECOMMENDATION IS MADE TO THE DEAN OF THE COLLEGE BY THE HEAD OF THE DEPARTMENT.

SEQUENCE OF COURSES--STUDENTS IN THE CURRICULUM IN CHEMISTRY, MAJORS IN CHEMISTRY, AND ALL OTHERS WHO DESIRE A THOROUGH TRAINING IN THE FUNDAMENTALS OF CHEMISTRY AND THEIR APPLICATIONS TO MODERN LIFE SHOULD SELECT COURSES FROM THE FOLLOWING, USUALLY IN THE SEQUENCE GIVEN--CHEM. 107, 108, 234, 336, 342, 343, 344, 345, 321, 315, AND COURSES IN BIOCHEMISTRY, CHEMICAL ENGINEERING, ANALYTICAL, INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY. STUDENTS WHO DO NOT MEET THE REQUIREMENTS OF PREVIOUS HIGH SCHOOL CHEMISTRY AND THE THOROUGH MATHEMATICS BACKGROUND NECESSARY FOR REGISTRATION IN CHEM. 107, MAY REGISTER IN CHEM. 101 OR 102 BEFORE TAKING THE SEQUENCE CHEM. 107 AND 108. STUDENTS IN THE COLLEGE OF ENGINEERING--EXCEPT CERAMISTS, CERAMIC ENGINEERS, AND THOSE WHO WISH TO TAKE CHEM. 342--SHOULD REGISTER IN CHEM. 101 OR 102, 104, 123, OR IN 109 AND 123.

STUDENTS WHO WISH TO SATISFY A LIMITED CHEMISTRY REQUIREMENT MAY REGISTER FOR THE SEQUENCE CHEM. 101 OR 102, 105, 122, 132, OR 133. STUDENTS WITH EXCEPTIONALLY GOOD RECORDS MAY TAKE 109 INSTEAD OF 102 AND 105.

RESTRICTIONS--STUDENTS IN THE CURRICULA OF CHEMISTRY OR CHEMICAL ENGINEERING MUST HAVE AT LEAST A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, IN ORDER TO BE ACCEPTED BY THE DEPARTMENT AS JUNIORS OR SENIORS. A TRANSFER STUDENT TO BE ACCEPTED MUST HAVE A CORRESPONDING RECORD IN THE INSTITUTION OR INSTITUTIONS FROM WHICH HE TRANSFERS AND MUST MAINTAIN A SIMILAR AVERAGE AT THE UNIVERSITY OF ILLINOIS. WITH THE EXCEPTION OF STUDENTS IN THE COLLEGE OF ENGINEERING AND THE COLLEGE OF AGRICULTURE, REGISTRATION OF STUDENTS IN CHEMISTRY COURSES EXCEPT THOSE OF FRESHMAN AND SOPHOMORE GRADE, NAMELY, CHEM. 101, 102, 104, 105, 107, 108, 109, 111, 122, 123, 132, 133, NORMALLY IS RESTRICTED TO STUDENTS HAVING A 3.5 GENERAL AVERAGE, EXCLUSIVE OF THE BASIC COURSES IN MILITARY TRAINING AND THE REQUIRED WORK IN PHYSICAL EDUCATION, OR AN AVERAGE OF AT LEAST 3.5 IN HIS CHEMISTRY COURSES. ANY JUNIOR OR SENIOR WHO CANNOT MEET EITHER OF THESE REQUIREMENTS MUST PETITION FOR ADMITTANCE AS A MAJOR OR MINOR IN CHEMISTRY.

BIOCHEMISTRY--STUDENTS WHO WISH TO SPECIALIZE IN BIOCHEMISTRY ARE DIRECTED TO THE CHEMISTRY CURRICULUM OR TO A STRONG CHEMISTRY MAJOR PROGRAM. SUCH STUDENTS SHOULD PLAN THEIR PROGRAMS SO AS TO INCLUDE, IN ADDITION TO CHEMISTRY AND BIOCHEMISTRY, BASIC COURSES IN MATHEMATICS, THROUGH CALCULUS, AND PHYSICS, THROUGH PHYSICS 108, AND A YEAR OF ADVANCED UNDERGRADUATE BIOLOGY. STUDENTS IN RELATED FIELDS WISHING TO TAKE UNDERGRADUATE COURSES IN BIOCHEMISTRY ARE URGED TO PLAN THEIR PROGRAMS SO AS TO PROVIDE AN EQUIVALENT BACKGROUND. STUDENTS ARE ENCOURAGED TO DISCUSS THEIR PROGRAMS WITH THE STAFF OF THE DIVISION OF BIOCHEMISTRY OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING.

CHEMISTRY

COURSES FOR UNDERGRADUATES

CHEM 101 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL PHYSICS, OR TWO AND ONE-HALF UNITS OF HIGH SCHOOL MATHEMATICS, OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

02407	LECT	2	MTUWTH	138	ADMIN
	QUIZ	1	MTUWTH	138	ADMIN
	LAB	10-12	MTUWTH	201	C A

CHEM 102 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL CHEMISTRY OR EQUIVALENT, 2 1/2 UNITS OF HIGH SCHOOL MATHEMATICS OR CREDIT IN MATH. 111 OR 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE 2 HOURS CREDIT.
*3 HOURS

02415	LECT	2	MTUWTH	138	ADMIN
	QUIZ	1	MTUWTH	143	ADMIN
	LAB	10-12	TU TH	201	C A

CHEM 122 ELEMENTARY QUANTITATIVE ANALYSIS.
FOR ALL STUDENTS IN HOME ECONOMICS AND PREMEDICAL COURSES AND ALL OTHERS WHO HAVE NOT FOLLOWED THE SEQUENCE CHEM. 101 OR 102, 107 AND 108.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

02423	LECT	11	MTU THF	111	N L
	QUIZ	11	W S	111	N L
	LAB	8-11	MTUWTHFS	301	C A

CHEM 123 QUANTITATIVE ANALYSIS FOR ENGINEERS.
PREREQUISITE--CHEM. 104, 105, OR 109.
3 HOURS

02431	LECT	11	MTU THF	111	N L
	QUIZ	11	W S	111	N L
	LAB	8-11	MTUWTHFS	301	C A

CHEM 132 ELEMENTARY ORGANIC CHEMISTRY.
PREREQUISITE--CHEM. 101, 102, 109, OR EQUIVALENT.
3 HOURS

02440	LECT	8	TUWTHF	161	N L
	QUIZ	1	TU TH	161	N L
	LAB	2-5	TU TH	467	N L

CHEM 133 ELEMENTARY ORGANIC CHEMISTRY.
FOR STUDENTS IN AGRICULTURAL SCIENCE, DAIRY TECHNOLOGY, FOOD TECHNOLOGY, NUTRITION, DIETETICS, AND PREMEDICAL, PREDENTAL AND PREVETERINARY COURSES.
PREREQUISITE--CHEM 105 OR 108 OR 109.
5 HOURS

02458	LECT		9	MTU THF	112	C A		PIRKLE
	QUIZ		9	W S	112	C A		
	CONF		1	W F	112	C A		
	LAB		2-5	W F	467	N L		
			1-5	M	467	N L		

COURSES FOR ADVANCED UNDERGRADUATES

CHEM 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMISTRY CURRICULUM.
PREREQUISITE--MAJORS IN CHEMISTRY IN THE GENERAL CURRICULUM MAY REGISTER IF THEY HAVE COMPLETED A MINIMUM OF TWENTY-THREE HOURS OF CHEMISTRY, WHICH MUST INCLUDE AT LEAST FIVE HOURS FROM THE COURSES FOR ADVANCED UNDERGRADUATES. OTHER STUDENTS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT WHO DESIRES TO DO RESEARCH MUST RECEIVE SPECIAL WRITTEN PERMISSION FROM THE INSTRUCTOR UNDER WHOM HE WISHES TO WORK. SUCH WRITTEN PERMISSION SHOULD BE PRESENTED, AT THE TIME OF REGISTRATION, TO THE ADVISER FOR THE CHEMISTS. EACH STUDENT TAKING THIS COURSE MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. IN ORDER TO RECEIVE CREDIT A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CHEM. 290.
2 TO 6 HOURS

02466	CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CHEM 315 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN PHYSICAL CHEMISTRY.
3 HOURS, OR 3/4 UNIT

02474	LECT		11	MTUWTHF	138	ADMIN		
			4	TU	138	ADMIN		

CHEM 316 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN CHEM. 315.
2 HOURS, OR 1/2 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

02482	CONF		4	TH	138	ADMIN		
	LAB		*1-4	M F	212	C A		

CHEM 321 CHEMICAL AND INSTRUMENTAL ANALYSIS.
PREREQUISITE--CHEM. 336, AND 340 OR 342 WITH CONCURRENT REGISTRATION IN CHEM. 343 AND 344.
5 HOURS, OR 3/4 OR 1 1/4 UNITS

02491	LECT		8	MTUWTHFS	162	N L		
02503	LAB	A	9-12	MTUW	315	N L		
		A	1-5	MTU	315	N L		
02511	LAB	B	1-4	W	315	N L		
		B	9-12	THF	315	N L		
		B	1-5	THF	315	N L		

CHEM 343 PHYSICAL CHEMISTRY LABORATORY, I.
PREREQUISITE--CHEM. 342.
1 HOUR, OR 1/4 UNIT

02520	LAB		ARR		124	N L		

CHEM 344 PHYSICAL CHEMISTRY.
PREREQUISITE--CHEM. 342.
3 HOURS, OR 3/4 UNIT

02538	LECT		9	MTUWTHFS	161	N L		

CHEM 345 PHYSICAL CHEMISTRY LABORATORY, II.
PREREQUISITE--CHEM. 342, CREDIT OR REGISTRATION IN CHEM. 343 AND 344.
1 HOUR, OR 1/4 UNIT

02546	LAB		ARR		116	N L		

CHEM 350 GENERAL BIOCHEMISTRY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY AND CHEM. 133 OR 234, OR EQUIVALENTS.
3 HOURS, OR 3/4 UNIT

02554	LECT	8	MTUWTHFS	115	E C

CHEM 355 BIOCHEMISTRY LABORATORY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY, CHEM. 133 OR 234, OR EQUIVALENT, REGISTRATION IN CHEM. 350.
3 HOURS, OR 3/4 UNIT

02562	LAB	9-12	MTUWTHF	318	E C

COURSES FOR GRADUATES

CHEM 435 ORGANIC CHEMISTRY SEMINAR.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 UNIT

02571	LECT-DISC	10	M W	138	ADMIN

CHEM 449 SPECIAL TOPICS IN PHYSICAL CHEMISTRY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE CREDIT.
*1/2 OR 1 UNIT

02589	LECT	10	MTUWTHF	143	ADMIN

CHEM 455 BIOCHEMISTRY SEMINAR.
REQUIRED OF GRADUATE STUDENTS WHOSE MAJOR IS BIOCHEMISTRY.
PREREQUISITE--CHEM. 350 AND 355, OR EQUIVALENT.
1/2 UNIT

02597	LECT-DISC	10-12	TU TH	116	E C

CHEM 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS, SUBJECT TO THE APPROVAL OF ONE OF THE QUALIFIED STAFF MEMBERS-
ANALYTICAL CHEMISTRY . . .BROWNLEE, HARTLEY, JUVET, LAITINEN, MALMSTADT, PFLUGER
BIOCHEMISTRY . . . CARTER, CLARK, CONRAD, GUNSALUS, HAGER, HASTINGS, SPIEGELMAN, SCHROEPFER, C W TODD, WEBER, WOLD.
BIOPHYSICAL CHEMISTRY . . . BLOOMFIELD, HASTINGS, PAUL, VAN HOLDE, WEBER, WOLD, WOODY.
INORGANIC CHEMISTRY . . . BAILAR, BROWN, DRAGO, KAY, MOELLER, STUCKY, L J TODD.
ORGANIC CHEMISTRY . . . APPLEQUIST, BALDWIN, BEAK, COATES, CURTIN, LEONARD, MARTIN, PIRKLE, RINEHART, SMITH, SNYDER
PHYSICAL CHEMISTRY . BELFORD, BLOOMFIELD, DRICKAMER, FLYGARE, GOODISMAN, GUTOWSKY, HUMMEL, MARCUS, PAUL, SECREST, SIM, VAN HOLDE, WOODY, YANKWICH
APPLIED ELECTROCHEMISTRY--ORGANIC AND INORGANIC . . . SWANN
RADIO CHEMISTRY . . . . . NYSTROM, BROWNLEE, KAY, HUMMEL
RESEARCH FOR THE PH. D. IS ALSO OFFERED IN SPECIALIZED FIELDS OTHER THAN THOSE ILLUSTRATED ABOVE. STUDENTS WHO INTEND TO MAJOR IN CHEMISTRY IN ONE OF THESE SPECIAL FIELDS SHOULD CONSULT WITH THE PROFESSOR IN CHARGE OF THE THESIS AND WITH THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING IN REGARD TO THE PROGRAMS OF COURSES AND EXAMINATIONS.

02600	CONF	ARR	STAFF

CHEMICAL ENGINEERING

COURSES FOR ADVANCED UNDERGRADUATES

CH E 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMICAL ENGINEERING CURRICULUM. ANY OTHERS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT.
*EACH STUDENT MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. HOWEVER, CH. E. 379 TWO HOURS, MAY BE SUBSTITUTED FOR TWO OF THE FIVE HOURS REQUIRED IN CH. E. 290. IN ORDER TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CH. E. 290.
*2 TO 6 HOURS

02618	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CH E 374 UNIT OPERATIONS LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN CH. E. 373.
3 HOURS, OR 1/2 UNIT
*TWO HOURS TO BE ARRANGED.

02626	CONF	*ARR					ECKERT
	LAB		1-5	TU TH	8	E C	

CH E 379 CHEMICAL ENGINEERING PROJECTS.
PREREQUISITE--SENIOR STANDING IN CHEMISTRY OR CHEMICAL ENGINEERING.
2 HOURS, OR 1/2 UNIT

02634	LAB		1-5	M W	294	E C	SANI

COURSES FOR GRADUATES

CH E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
INSTRUCTORS--DRICKAMER, ECKERT, HANRATTY, HUDSON, QUINN, SANI, SWANN, SCHMITZ, WESTWATER.

02642	CONF		ARR				STAFF

CIVIL ENGINEERING

DEPARTMENT OFFICE 203 E H

COURSES FOR ADVANCED UNDERGRADUATES

C E 262 STRUCTURAL THEORY, II.
PREREQUISITE--C. E. 261.
3 HOURS

02651	LECT-DISC	E	8	MTUWTHFS	162	E E B	

C E 263 BEHAVIOR AND DESIGN OF METAL STRUCTURES, I.
PREREQUISITE--T.A.M. 224 AND C.E. 261, OR CONSENT OF INSTRUCTOR.
3 HOURS

02669	LECT-DISC	E	10	MTUWTHFS	161	E E B	

C E 264 REINFORCED CONCRETE DESIGN, I.
PREREQUISITE--C. E. 214, C. E. 261, T. A. M. 224.
3 HOURS
NOTE--THREE-TWO HOUR DEMONSTRATION LABORATORIES TO BE ARRANGED.
*SECTION F IS A SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 15 FOR MILITARY STUDENTS ONLY.

02677	LECT-DISC	E	9	MTUWTHFS	161	E E B	
02685	LECT-DISC	*F	ARR				

C E 290 CONTRACTS AND SPECIFICATIONS.
SAME AS G. E. 290.
PREREQUISITE--SENIOR STANDING IN ENGINEERING OR ARCHITECTURE.
CREDIT IS NOT GIVEN FOR C. E. 290 IN ADDITION TO G. E. 292
3 HOURS
SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 15 FOR MILITARY
STUDENTS ONLY.

02693	LECT-DISC	E		ARR				

C E 297 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING.
1 TO 4 HOURS

02706	CONF			ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C E 334 AIRPORT DESIGN.
PREREQUISITE--C.E. 220 AND SENIOR STANDING IN CIVIL ENGINEERING, OR
CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

02714	LECT-DISC	E	1	MTUWTHF	161	E E B		HERRIN

C E 366 BEHAVIOR OF REINFORCED CONCRETE MEMBERS.
PREREQUISITE--UNDERGRADUATES-SENIOR STANDING AND C.E. 264, GRAD
STUDENTS-B.S.DEGREE IN C.E. OR ARCHITECTURE WITH COURSES IN
STRUCTURES AND REINFORCED CONCRETE DESIGN.
4 HOURS, OR 1 UNIT

02722	LECT-DISC		1-3	M W F	162	E E B		SIESS

C E 368 PRESTRESSED CONCRETE.
PREREQUISITE--C. E. 262, 264.
3 HOURS, OR 3/4 OR 1 UNIT

02731	LECT-DISC	E	11	MTUWTHFS	161	E E B		KHACHATURIAN

C E 380 FOUNDATION ENGINEERING.
PREREQUISITE--C E 210, SENIOR STANDING.
3 HOURS, OR 1 UNIT

02749	LECT-DISC	E	8	MTUWTHFS	161	E E B		

C E 383 SOIL MECHANICS.
UNDERGRADUATE PREREQUISITE--C.E. 210, SENIOR STANDING AND CONSENT
OF INSTRUCTOR. GRADUATE PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT

02757	LECT-DISC	E	11	MTUWTHFS	162	E E B		IRELAND

C E 391 NUMERICAL AND COMPUTER APPLICATIONS IN CIVIL ENGINEERING.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN CIVIL OR ARCH. ENG. OR
CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

02765	LECT-DISC	E	9	MTUWTHFS	163	E E B		MELIN

COURSES FOR GRADUATES

C E 456 HYDRAULICS OF SURFACE DRAINAGE.
PREREQUISITE--T.A.M. 235.
1 UNIT
*ADDITIONAL HOUR TO BE ARRANGED.

02773	LECT-DISC		*10	MTUWTHF	163	E E B		CHOW

C E 461 STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--B.S. IN C.E., AND C.E. 361, OR C.E. 460, OR
EQUIVALENT.
1 UNIT

02781	LECT-DISC	E	11	MTUWTHF	163	E E B		HALL

C E 465 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--B.S. IN ENGINEERING WITH COURSES IN STRUCTURES.
1 UNIT

02790	LECT-DISC	E	10	MTUWTHF	162	E E B		GAYLORD

C E 471 NUMERICAL AND APPROXIMATE METHODS OF STRUCTURAL ANALYSIS.
1 TO 2 UNITS
02802 LECT-DISC E 9 MTUWTHF 162 E E B EUBANKS

C E 475 BEHAVIOR OF STEEL STRUCTURES.
PREREQUISITE--GRADUATE STANDING IN C.E. OR T.A.M.
1 UNIT
02811 LECT-DISC E 8 MTUWTHF 163 E E B MUNSE

C E 484 FOUNDATION ENGINEERING.
PREREQUISITE--C. E. 384.
1 UNIT
02829 LECT-DISC 2 MTUWTHF 163 E E B PECK

C E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS
02837 CONF O ARR STAFF

C E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION-M-IS FOR MASTERS DEGREE, *SECTION-D-IS FOR PH.D. DEGREE.
02845 CONF *M ARR STAFF
02853 CONF *D ARR STAFF

CLASSICS

DEPARTMENT OFFICE 360 L H

CLASSICAL CIVILIZATION

NOTE--THE FOLLOWING COURSES PRESUPPOSE NO KNOWLEDGE OF THE GREEK OR LATIN LANGUAGE AND ARE OPEN TO ALL STUDENTS. FOR OTHER COURSES IN THE AREA OF CLASSICAL CIVILIZATION SEE ARCH. 113, ART 311, HIST. 181, 182, 381, 382, 383, AND 384, AND PHIL. 303 AND 309.

COURSES FOR UNDERGRADUATES

CLCIV 111 MYTHOLOGY OF GREECE AND ROME.
2 HOURS
02861 LECT-DISC A 8 TUWTHF 362 L H NAOUMIDES

COMMUNICATIONS

DEPARTMENT OFFICE 119 G H

THE GRADUATE PROGRAM LEADING TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATIONS IS ADMINISTERED BY AN INTERDISCIPLINARY COMMITTEE APPOINTED BY THE DEAN OF THE GRADUATE COLLEGE. STUDENTS SEEKING ADMISSION TO THIS PROGRAM SHOULD CONSULT THEODORE PETERSON, CHAIRMAN OF THE COMMITTEE.

OF THE COURSES OFFERED THIS TERM, COMM. 490 AND 499 ARE IN THE GENERAL CATEGORY. COMM. 462 AND 468 ARE IN GROUP A. GROUP B HAS NO OFFERINGS THIS TERM.

COURSES FOR GRADUATES

COMM 462 SEMINAR IN RADIO AND TELEVISION.
SAME AS R. TV. 462.
1 UNIT
02870 LECT-DISC 1-3 TU TH 123 G H SKORNIA

COMM 468 THE POLITICAL ECONOMY OF COMMUNICATIONS.
SAME AS JOURN. 468.
1 UNIT
02888 LECT-DISC 10-12 TU TH 123 G H GUBACK

COMM 490 SPECIAL TOPICS IN COMMUNICATIONS.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS.
1/2 TO 2 UNITS
02896 CONF ARR STAFF

COMM 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS AND THESIS SUPERVISOR.
*STUDENTS MAY ACCUMULATE A TOTAL OF 8 UNITS.
*0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
02909 CONF ARR STAFF

DAIRY SCIENCE

DEPARTMENT OFFICE 315 A S L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

D S 300 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5--NOT OPEN TO STUDENTS ON PROBATION-SENIOR STANDING-CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT.
3 TO 5 HOURS, OR 1/2 OR 1 UNIT
SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
02917 CONF ARR SALISBURY AND STAFF

D S 305 GENETICS AND ANIMAL IMPROVEMENT.
SAME AS AN. S. 305.
PREREQUISITE--D. S. 110 OR EQUIVALENT.
3 HOURS, OR 3/4 UNIT, SUMMER 1/2 UNIT
FIRST FOUR WEEKS.
02925 LECT-DISC 1-3 MTUWTH 341 A S L DEFRIES AND TOUCHBERRY

COURSES FOR GRADUATES

D S 493 SPECIAL PROBLEMS.
1/2 TO 2 UNITS
02933 CONF ARR SALISBURY AND STAFF

D S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
02941 CONF ARR SALISBURY AND STAFF

DAIRY TECHNOLOGY

SEE FOOD SCIENCE

DIVISION OF GENERAL STUDIES L A S

DEPARTMENT OFFICE 221 A H

COURSES FOR UNDERGRADUATES

D G S 111 VERBAL COMMUNICATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

02950	LECT		9	TU TH	124	BUR HALL	HILL
02968	DISC	A	8-10	M W F	141	A H	WILSON
02976	DISC	C	10-12	M W F	141	A H	HILL

D G S 132 BIOLOGICAL SCIENCE, II.
PREREQUISITE--D.G.S. 131 OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN IN D. G. S. 132 IN ADDITION TO CREDIT IN BOT. 100, PHYSL. 103, ZOOL. 101 OR 104.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

02984	LECT		11	MTUWTH	229	N H B	BANKS
02992	LAB-DISC	1	1-3	MTUWTH	432	N H B	
03007	LAB-DISC	2	3-5	MTUWTH	432	N H B	

D G S 141 PHYSICAL SCIENCE, I.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

03015	LECT-DISC	F	1-3	MTUWTHF	158	P B	GAIDES

D G S 161 LITERATURE AND FINE ARTS, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
4 HOURS

03023	LECT-DISC		1-3	MTUWTH	196	L H	DRAPER

ECONOMICS

DEPARTMENT OFFICE 330 COM W

MAJOR--FOR L A S STUDENTS WHO ENTERED THE UNIVERSITY SEPTEMBER, 1964, AND AFTER--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108- OR 102 AND 103-171, 300, AND 301. MATH. 124 AND 132 OR MATH. 134 ARE ALSO REQUIRED BUT ARE NOT ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR. LIBERAL ARTS MAJORS ARE STRONGLY ADVISED TO ELECT ACCY 201, WHICH IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

FOR L A S STUDENTS WHO ENTERED THE UNIVERSITY BEFORE SEPTEMBER, 1964--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108 OR 102 AND 103, AND ECON. 300 AND 301. LIBERAL ARTS MAJORS IN ECONOMICS ARE STRONGLY ADVISED TO ELECT ECON. 171 AND ACCY 201. ECON. 171 IS ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR, BUT ACCY. 201 IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, EDUCATION, FINANCE, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY. AN ECONOMICS MAJOR WHO CHOOSES FINANCE AS A MINOR MUST INCLUDE TWELVE HOURS IN A SECOND MINOR. THE CURRICULUM IN LATIN-AMERICAN OR RUSSIAN AREA STUDIES IS ACCEPTED AS A MINOR.

NOTE--ECON. 102 AND 103 ARE REQUIRED FOR ALL COMMERCE STUDENTS, AND THESE OR 108 ARE REQUIRED FOR ALL LIBERAL ARTS MAJORS IN ECONOMICS. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN ECONOMICS SHOULD TAKE THESE COURSES IN THEIR SOPHOMORE YEAR.

COURSES FOR UNDERGRADUATES

ECON 102 PRINCIPLES OF ECONOMICS, I.
PREREQUISITE--ONE SEMESTER OF UNIVERSITY WORK
3 HOURS

03031	LECT-DISC	A	8	MTUWTHF	40	COM W
		A	3	W	40	COM W

ECON 103 PRINCIPLES OF ECONOMICS, II.
PREREQUISITE--ECON. 102.
3 HOURS

03040	LECT-DISC	C	10	MTUWTHF	111	D K H
		C	3	W	111	D K H

ECON 108 ELEMENTS OF ECONOMICS.
NOT OPEN TO COMMERCE STUDENTS OR STUDENTS WHO HAVE HAD ECON. 102 AND 103.
PREREQUISITE--FIRST SEMESTER FRESHMAN IN ENGINEERING, SECOND SEMESTER FRESHMAN IN OTHER COLLEGES.
3 HOURS

03058	LECT-DISC	A	8	MTUWTHF	240	COM W
		A	3	M	240	COM W
03066	LECT-DISC	B	9	MTUWTHF	111	D K H
		B	2	TH	111	D K H
03074	LECT-DISC	D	11	MTUWTHF	240	COM W
		D	3	W	240	COM W

ECON 172 ECONOMIC STATISTICS, I.
PREREQUISITE--CREDIT OR REGISTRATION OR EQUIVALENT IN ECON. 102, OR 108, AND MATH. 134.
3 HOURS

03082	LECT-DISC	B	9	MTUWTHF	40	COM W
		B	3	TU	40	COM W
	LAB	B	3	W	205	D K H

ECON 173 ECONOMIC STATISTICS, II.
PREREQUISITE--CREDIT OR REGISTRATION OR EQUIVALENT IN ECON. 172.
3 HOURS

03091	LECT-DISC	D	11	MTUWTHF	40	COM W
		D	3	M	40	COM W
	LAB	D	3	TU	205	D K H

COURSES FOR ADVANCED UNDERGRADUATES

ECON 200 ECONOMIC ANALYSIS FOR BUSINESS.
PREREQUISITE--ECON. 103, MATH. 134 OR EQUIVALENT, AND CREDIT OR REGISTRATION IN ECON. 173 OR EQUIVALENT.
3 HOURS

03103	LECT-DISC	B	9	MTUWTHF	94	COM W
		B	3	W	94	COM W

ECON 214 GOVERNMENT FINANCE AND TAXATION.
PREREQUISITE--ECON. 103, OR 108.
3 HOURS

03111	LECT-DISC	C	10	MTUWTHF	20	COM W
		C	3	W	20	COM W

ECON 240 LABOR PROBLEMS.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

03120	LECT-DISC	C	10	MTUWTHF	40	COM W
		C	3	TH	40	COM W

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ECON 300 INTERMEDIATE MICRO-ECONOMIC THEORY.
PREREQUISITE--ECON. 103, OR 108.
*STUDENTS MAY NOT RECEIVE CREDIT FOR BOTH ECON. 200 AND 300.
*3 HOURS, OR 1/2 UNIT

03138	LECT-DISC	D	11	MTUWTHF	20	COM W
		D	3	TH	20	COM W

```
ECON  374     OPERATIONS RESEARCH.
         PREREQUISITE--ECON. 170 AND I. ADM. 101, OR CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1/2 OR 1 UNIT
       03146      LECT-DISC  C        9        MTUWTHF    140  COM W
                             C        2           W       140  COM W
```

COURSES FOR GRADUATES

```
ECON  400     GENERAL ECONOMIC THEORY.
         PREREQUISITE--ECON. 103 OR 108.
         1 UNIT
       03154      LECT-DISC  A      830-10     MTUWTH      20  COM W

ECON  401     GENERAL ECONOMIC THEORY.
         PREREQUISITE--ECON. 103 OR 108.
         1 UNIT
         *ENROLLMENT RESTRICTED TO STUDENTS IN THE NATIONAL SCIENCE
         FOUNDATION SUMMER INSTITUTE IN ECONOMICS.
       03162      LECT-DISC *E        1-3      MTUWTHF    240  COM W

ECON  412     ADVANCED AGGREGATE INCOME THEORY.
         PREREQUISITE--GRADUATE STANDING, ECON. 403, OR CONSENT
         OF INSTRUCTOR.
         1 UNIT
       03171      LECT-DISC  E        1-3      M  W  F     20  COM W

ECON  436     AMERICAN ECONOMIC HISTORY.
         NOT OPEN TO STUDENTS WHO HAVE HAD ECON. 236.
         1 UNIT
         *ENROLLMENT RESTRICTED TO STUDENTS IN THE NATIONAL SCIENCE
         FOUNDATION SUMMER INSTITUTE IN ECONOMICS.
       03189      LECT-DISC  B        9        MTUWTHF    240  COM W
                             B        3         TU        240  COM W
       03197      LECT-DISC *C        9-11     MTUWTHF    240  COM W

ECON  441     LABOR ECONOMICS.
              SAME AS L.I.R. 441.
         PREREQUISITE--A MINIMUM OF SIX HOURS OF ECONOMICS.
         1 UNIT
       03200      LECT-DISC  E        1-3       TU TH      94  COM W

ECON  470     ECONOMIC STATISTICS.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         1 UNIT
       03218      LECT-DISC  C       10-12     MTUWTH     140  COM W

ECON  490     INDIVIDUAL STUDY AND RESEARCH.
         1/2 TO 1 UNIT
       03226      DISC              ARR

ECON  499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
       03234      LECT-DISC         10-12          F    140  COM W
```

EDUCATION ADMINISTRATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR GRADUATES

```
ED AD 430     ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         1 UNIT
         MEETS FIRST FOUR WEEKS ONLY.
       03242      LECT-DISC         *9-11     TUWTHF     130  COM W          SPRINGER
```

ED AD 438 INSTRUCTIONAL SUPERVISION.
PREREQUISITE--EL. ED. OR SE. ED. 439 AND ED. AD. 460.
1 UNIT

03251	LECT-DISC	A	8	TUWTHF	162	EDUC	DODL
03269	LECT-DISC	C	10	TUWTHF	172	ARMORY	

ED AD 440 ADMINISTRATION AND SUPERVISION OF JUNIOR AND SENIOR HIGH SCHOOLS.
PREREQUISITE--ED. AD. 460 OR CONSENT OF INSTRUCTOR.
1 UNIT
*MEETS FIRST FOUR WEEKS ONLY.

03277	LECT-DISC		*9-11	TUWTHF	24	COM W	DOOLITTLE

ED AD 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

03285	CONF		ARR				STAFF

ED AD 460 PUBLIC CONTROL AND ADMINISTRATION OF EDUCATION.
NOT OPEN TO EXPERIENCED ADMINISTRATORS OR TO ANY STUDENTS WHO HAVE TAKEN ANY OF THE FOLLOWING COURSES--OR EQUIVALENT--ED. AD. 430, 440, 461, 462, 464, 465, 466.
1 UNIT

03293	LECT-DISC	B	9	TUWTHF	172	ARMORY	WALKER
03306	LECT-DISC	A	8	TUWTHF	172	ARMORY	

ED AD 461 ADMINISTRATION OF EDUCATIONAL PROGRAMS AND PERSONNEL.
PREREQUISITE--ED. AD. 460, AND 430 OR 440.
1 UNIT

03314	LECT-DISC		11-3	W F	24	COM W	MCCLEARY

ED AD 462 FINANCIAL AND OPERATING STRUCTURES OF PUBLIC EDUCATION.
PREREQUISITE--ED. AD. 460, 461, 430 OR 440.
1 UNIT

03322	LECT-DISC		11-3	TU TH	96	COM W	

ED AD 463 THE ROLE OF ADMINISTRATIVE LEADERSHIP.
PREREQUISITE--ED. AD. 460-462, 430 OR 440.
1 UNIT

03331	LECT-DISC		11-3	TU TH	24	COM W	HENCLEY AND WALKER

ED AD 464 FIELD PROBLEMS IN EDUCATIONAL ADMINISTRATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS
SECTIONS A AND B MEET SECOND FOUR WEEKS ONLY.

03365	CONF	*A	9-12	TUWTHF	130	COM W	SPRINGER
03373	CONF	*B	9-12	TUWTHF	385	EDUC	DOOLITTLE
03349	CONF	H	ARR				HENDERSON
03357	CONF		ARR				STAFF

ED AD 466 PUBLIC SCHOOL FINANCE.
PREREQUISITE--ED. AD. 460 AND 430 OR 440 AND 462.
1 UNIT

03381	LECT-DISC		9	TUWTHF	389	EDUC	MCLURE

ED AD 468 SCHOOL-COMMUNITY RELATIONS.
1 UNIT

03390	LECT-DISC		9	TUWTHF	382	EDUC	SUMPTION

ED AD 469 LEGAL BASIS OF SCHOOL ADMINISTRATION.
1 UNIT

03402	LECT-DISC		10	TUWTHF	96	COM W	SUMPTION

ED AD 470 PRINCIPLES AND RESOURCES FOR SCHOOL PLANT PLANNING.
PREREQUISITE--ED. AD. 460.
1 UNIT

03411	LECT-DISC		8	TUWTHF	11	COM W	

ED AD 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

03429	CONF		ARR			HENCLEY

EDUCATIONAL PSYCHOLOGY

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR ADVANCED UNDERGRADUATES

EDPSY 211 EDUCATIONAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100.
3 HOURS

03437	LECT-DISC		1	TUWTHF	241	ARMORY
	LAB		3-5	TU	162	EDUC

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

EDPSY 311 PSYCHOLOGY OF LEARNING FOR TEACHERS.
PREREQUISITE--PRACTICE TEACHING OR TEACHING EXPERIENCE, AND ED. PSY. 211.
2 HOURS, OR 1/2 UNIT
*MEETS FIRST FOUR WEEKS ONLY.

03445	LECT-DISC	A1	8	TUWTHF	215	G H	KNAPP
03453	LECT-DISC	A2	8	TUWTHF	153	ARMORY	SOARES
03461	LECT-DISC	B1	9	TUWTHF	215	G H	SMITH
03470	LECT-DISC	B2	9	TUWTHF	217	G H	
03488	LECT-DISC	B3	9	TUWTHF	242	ARMORY	
03496	LECT-DISC	C1	10	TUWTHF	153	ARMORY	SOARES
03509	LECT-DISC	C2	10	TUWTHF	217	G H	KNAPP
03517	LECT-DISC	D	11	TUWTHF	243	ARMORY	SMITH
03533	LECT-DISC	*E1	1-3	TUWTHF	2	EDUC	JONES
03525	LECT-DISC	E2	1	TUWTHF	217	G H	

EDPSY 312 MENTAL HYGIENE AND THE SCHOOL.
PREREQUISITE--PRACTICE TEACHING OR TEACHING EXPERIENCE, AND ED. PSY. 211.
2 HOURS, OR 1/2 UNIT
*MEETS SECOND FOUR WEEKS ONLY.

03541	LECT-DISC	A1	8	TUWTHF	329	ARMORY	DELANEY
03550	LECT-DISC	A2	8	TUWTHF	154	ARMORY	
03568	LECT-DISC	B1	9	TUWTHF	143	ADMIN	
03576	LECT-DISC	B2	9	TUWTHF	111	G H	
03584	LECT-DISC	C1	10	TUWTHF	254	ADMIN	
03592	LECT-DISC	C2	10	TUWTHF	221	G H	ZACCHARIA
03605	LECT-DISC	D1	11	TUWTHF	221	G H	
03613	LECT-DISC	D2	11	TUWTHF	250	ARMORY	GRIFFIN
03630	LECT-DISC	*E1	1-3	TUWTHF	430	ARMORY	PERKINS
03621	LECT-DISC	E2	1	TUWTHF	215	G H	GRIFFIN

EDPSY 326 INTRODUCTION TO VOCATIONAL REHABILITATION COUNSELING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

03648	LECT-DISC		ARR			MOSES

EDPSY 343 INDIVIDUAL INTELLIGENCE TESTING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY AND SP. ED. 324, OR ED. PSY. 392 OR PSYCH. 290, OR EQUIVALENT.
3 HOURS, OR 1 UNIT

03656	LECT-DISC		1-3	TUWTHF	134	E P G B	NEWLAND

EDPSY 390 ELEMENTS OF EDUCATIONAL STATISTICS.
3 HOURS, OR 1 UNIT
*OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.

03664	LECT-DISC	A1	8-10	TUWTHF	433	ARMORY	STAKE
03672	LECT-DISC	A2	8-10	TUWTHF	242	EDUC	TRAVERS
03681	LECT-DISC	B	10-12	TUWTHF	433	ARMORY	HASTINGS
03699	LECT-DISC	E1	1-3	TUWTHF	219	G H	COOK
03701	LECT-DISC	*E2	8-10	TUWTHF	113	D K H	KACZKOWSKI

EDPSY 391 CONSTRUCTION AND USE OF TESTS IN TEACHING.
PREREQUISITE--ED. PSY. 211.
4 HOURS, OR 1 UNIT

03710	LECT-DISC		9	TUWTHF	25	EDUC	GRONLUND

EDPSY 392 INTRODUCTION TO THE PRINCIPLES OF MEASUREMENT.
PREREQUISITE--ED. PSY. 211.
4 HOURS, OR 1 UNIT
*OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.

03728	LECT-DISC	A	8	TUWTHF	430	ARMORY	GAGE
03752	LECT-DISC	*C	11	TUWTHF	133	ARMORY	KACZKOWSKI
03736	LECT-DISC	D	11	TUWTHF	254	ADMIN	GRONLUND
03744	LECT-DISC	E	1	TUWTHF	221	G H	GAGE

COURSES FOR GRADUATES

EDPSY 411 PSYCHOLOGY OF ADOLESCENCE FOR TEACHERS.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

03761	LECT-DISC	A	8	TUWTHF	428	ARMORY	GARVERICK
03779	LECT-DISC	B	9	TUWTHF	223	G H	BLAIR
03787	LECT-DISC	C	10	TUWTHF	43	G H	KATZ

EDPSY 412 ADVANCED CHILD DEVELOPMENT FOR STUDENTS OF EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

03795	LECT-DISC		1	TUWTHF	223	G H	COSTIN

EDPSY 413 SOCIAL PSYCHOLOGY AND THE PROBLEMS OF EDUCATION.
PREREQUISITE--ED. PSY. 311, 312 AND 390.
1 UNIT
*PRIMARILY FOR STUDENTS IN SCHOOL ADMINISTRATION.

03808	LECT-DISC	D	11	TUWTHF	1	EDUC	SIMPSON
03824	LECT-DISC	*E	1	TUWTHF	1	EDUC	SIMPSON
03816	LECT-DISC	F	2	TUWTHF	192	EDUC	KATZ

EDPSY 414 THE PSYCHOLOGY OF COLLEGE TEACHING.
PREREQUISITE--A COURSE IN PSYCHOLOGY, CONSENT OF INSTRUCTOR.
1 UNIT

03832	LECT-DISC		1	TUWTHF	192	EDUC	GARVERICK

EDPSY 415 PSYCHOLOGICAL THEORIES APPLIED TO EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312, 411 OR 412, CANDIDACY
FOR ED. D. OR PH. D. IN EDUCATION.
1 UNIT

03841	LECT-DISC	A	1-3	W F	130	COM W	BLAIR
03859	LECT-DISC	B	3-5	TU TH	215	G H	

EDPSY 422 BASIC PRINCIPLES OF COUNSELING.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

03867	LECT-DISC	A	8	TUWTHF	152	ARMORY	PROFF
03875	LECT-DISC	B	9	TUWTHF	43	G H	DELANEY
03883	LECT-DISC	E	1	TUWTHF	143	ARMORY	THOMPSON

EDPSY 423 THE USE OF TESTS IN GUIDANCE.
PREREQUISITE--ED. PSY. 392.
1 UNIT

03891	LECT-DISC	A	8	TUWTHF	389	EDUC	GILBERT
03904	LECT-DISC	E	1-3	TU TH	173	ARMORY	PATTERSON

EDPSY 424 SUPERVISED PRACTICE IN COUNSELING.
PREREQUISITE--MASTERS DEGREE IN GUIDANCE AND
CONSENT OF FACULTY COMMITTEE.
2 UNITS

03912	CONF	A	ARR	BROPHY
03921	CONF	B	ARR	BONEY

EDPSY 425 PRINCIPLES OF GUIDANCE.
*CREDIT IS NOT GIVEN IN BOTH ED. PSY. 325 AND 425.
*1 UNIT
*OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.

03939	LECT-DISC	A	8	TUWTHF	217	G H	THOMPSON
03947	LECT-DISC	B1	9	TUWTHF	173	ARMORY	PROFF
03963	LECT-DISC	*B2	9	TUWTHF	243	ARMORY	BOSDELL
03955	LECT-DISC	E	1	TUWTHF	433	ARMORY	MOSES

EDPSY 426 DIAGNOSTIC AND REMEDIAL PROGRAMS OF THE SCHOOL.
PREREQUISITE--A BASIC COURSE IN THE TEACHING OF READING AND CONSENT OF INSTRUCTOR.
1 UNIT
*OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.

03980	LECT-DISC	*B	9	TUWTHF	15	EDUC	POWELL
03998	LECT-DISC	*C	10	TUWTHF	16	EDUC	POWELL
03971	LECT-DISC	D	11	TUWTHF	17	EDUC	ERICKSON

EDPSY 427 PRINCIPLES AND TECHNIQUES OF GROUP GUIDANCE.
PREREQUISITE--ED. PSY. 311, 312, 422, 423, AND EITHER 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

04002	LECT-DISC	A	8-10	TUWTHF	188S	EDUC	OHLSEN
04011	LECT-DISC	B	10-12	TUWTHF	188S	EDUC	GILBERT

EDPSY 428 THE ANALYSIS AND USE OF OCCUPATIONAL INFORMATION IN GUIDANCE PROGRAMS.
PREREQUISITE--ED. PSY. 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

04029	LECT-DISC		1	TUWTHF	382	EDUC	ZACCHARIA

EDPSY 429 FIELD INSTRUCTION IN COUNSELING.
PREREQUISITE--ED. PSY. 422 AND 424--WITH CONSENT OF INSTRUCTOR
ED. PSY. 424 MAY BE TAKEN CONCURRENTLY.
1 OR 2 UNITS

04037	CONF		ARR				PATTERSON

EDPSY 447 SEMINAR IN REHABILITATION COUNSELING.
PREREQUISITE--ED. PSY. 326 AND 422.
*MAY BE REPEATED FOR A MAXIMUM OF ONE UNIT.
*1/2 UNIT

04045	LECT-DISC		ARR				PATTERSON

EDPSY 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

04053	CONF		ARR				STAFF

EDPSY 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS
*OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.

04070	LECT-DISC	*A	1	TU	130	COM W	BOSDELL
04088	LECT-DISC	*B	1	W	11	COM W	BOSDELL
04096	LECT-DISC	*C	1	TH	130	COM W	BOSDELL
04061	LECT-DISC	D	2	TU TH	130	COM W	BOSDELL

EDPSY 496 STATISTICAL METHODS IN EDUCATION.
PREREQUISITE--ED. PSY. 390.
1 UNIT

04109	LECT-DISC	D	11	TUWTHF	192	EDUC	PINGRY
	LAB	D	1-3	TUW F	242	EDUC	
04117	LECT-DISC	E	1	TUWTHF	162	EDUC	GLASS
	LAB	E	ARR				

EDPSY 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

04125	CONF		ARR				STAFF

ELECTRICAL ENGINEERING

DEPARTMENT OFFICE 155 E E B

COURSES FOR UNDERGRADUATES

E E 114 WIRING AND ILLUMINATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
*ENGINEERING STUDENTS RECEIVE NO CREDIT.
*3 HOURS

04133	DISC	A	8-10	TU TH S	151	E E B

COURSES FOR ADVANCED UNDERGRADUATES

E E 220 BASIC ELECTRICAL ENGINEERING.
PREREQUISITE--PHYSICS 106 AND 107, AND MATH 143.
3 HOURS

04141	DISC	A	9	MTUWTHF	136	E E B
		A	1	M	136	E E B

E E 229 INTRODUCTION TO ELECTROMAGNETIC FIELDS.
PREREQUISITE--PHYCS. 107, T.A.M. 154, MATH. 345, CREDIT OR REGISTRATION IN E.E. 250.
3 HOURS

04150	DISC	A	11	MTUWTHF	169	E E B
		A	1	TH	169	E E B

E E 230 APPLICATION AND CONTROL OF MOTORS AND EQUIPMENT.
PREREQUISITE--E E 220.
2 HOURS

04168	DISC	A	8	MTUWTH	136	E E B

E E 231 POWER EQUIPMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E E 230.
1 HOUR

04176	LAB	A	2-5	M W	50E	E E B

E E 234 ELECTRICAL INSTRUMENTS AND MEASUREMENTS.
PREREQUISITE--E E 220.
2 HOURS

04184	DISC	A	10-12	TU TH	57	E E B

E E 235 ELECTRICAL MEASUREMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 234.
1 HOUR

04192	LAB	A	2-5	TU TH	137	E E B

E E 250 LINEAR NETWORK THEORY I.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN E. E. 251, MATH. 195 AND 345.
5 HOURS

04205	DISC	A	8-10	MTUWTHF	168	E E B
04213	DISC	B	8-10	MTUWTHF	257	E E B

E E 251 ELECTRICAL ENGINEERING LABORATORY I.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 250.
1 HOUR

04221	LAB	A	2-5	M W	50J	E E B
04230	LAB	B	2-5	TU TH	50J	E E B

E E 271 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

04248	DISC	A	ARR

E E 272 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

04256	CONF	ARR

E E 288 ECONOMIC ASPECTS OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING IN ENGINEERING
OR CONSENT OF INSTRUCTOR.
3 HOURS

04264	DISC	A	9	MTUWTHF	260	E E B
		A	1	TU	260	E E B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

E E 322 LINEAR NETWORK THEORY, 11.
PREREQUISITE--E.E. 250, 251, MATH. 195, 345.
4 HOURS, OR 0 TO 1 UNIT

04272	DISC	A	8-10	MTUWTH	170	E E B

E E 323 CIRCUIT LABORATORY.
PREREQUISITE--E. E. 251 AND 322, CREDIT OR REGISTRATION IN
E. E. 350.
1 HOUR, OR 0 OR 1/4 UNIT

04281	LAB	A	2-5	M W	132	E E B
04299	LAB	B	2-5	TU TH	132	E E B

E E 330 MAGNETIC CIRCUITS AND TRANSFORMERS.
PREREQUISITE--E.E. 229, 250, 251, CREDIT OR REGISTRATION IN
E.E. 331
3 HOURS, OR 0 OR 3/4 UNIT

04301	DISC	A	8	MTUWTHF	57	E E B
		A	1	M	57	E E B

E E 331 MAGNETIC CIRCUITS AND TRANSFORMER LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 330.
1 HOUR, OR 0 OR 1/4 UNIT

04310	LAB	A	2-5	M W	50K	E E B

E E 332 ELECTRICAL MACHINERY.
PREREQUISITE--E E 330 AND 331, CREDIT OR REGISTRATION IN E E 333.
3 HOURS, OR 0 OR 3/4 UNIT

04328	DISC	A	8	MTUWTHF	59	E E B
		A	1	F	59	E E B

E E 333 ELECTRICAL MACHINERY LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 332.
1 HOUR, OR 0 OR 1/4 UNIT

04336	LAB	A	2-5	M W	50F	E E B

E E 340 ELECTRONICS.
PREREQUISITE--E. E. 250 AND 251.
3 HOURS, OR 0 OR 3/4 UNIT

04344	DISC	A	10	MTUWTHF	257	E E B
		A	1	M	257	E E B

E E 341 ELECTRONICS EXPERIMENTATION.
PREREQUISITE--E. E. 251, CREDIT OR REGISTRATION IN E. E. 340.
1 HOUR, OR 0 OR 1/4 UNIT

04352	LAB	A	2-5	TU TH	235	E E B

E E 342 ADVANCED ELECTRONICS.
PREREQUISITE--E. E. 322, 340 AND 341.
3 HOURS, OR 0 OR 3/4 UNIT

04361	DISC	A	11	MTUWTHF	269	E E B
		A	1	TH	269	E E B

E E 343 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 342.
1 HOUR, OR 0 OR 1/4 UNIT

04379	LAB	A	2-5	M W	238	E E B

E E 347 INDUSTRIAL ELECTRONICS.
PREREQUISITE--E. E. 322, 330, AND 342.
*CREDIT IS NOT GIVEN FOR BOTH E. E. 347 AND E. E. 381.
*4 HOURS, OR 0 OR 1 UNIT
*RESTRICTED TO STUDENTS ENROLLED IN U OF I NSF INSTITUTE IN
ENGINEERING TECHNOLOGY.

04387	LAB-DISC	*A	8-10	MTUWTHF	234	E E B

E E 350 LINES, FIELDS, AND WAVES.
PREREQUISITE--E. E. 229, MATH. 195, CREDIT OR REGISTRATION IN E. E. 323.
3 HOURS OR 3/4 UNIT

04395	DISC	A	10	MTUWTHF	269	E E B
		A	1	W	269	E E B

E E 352 ELECTROMAGNETIC FIELDS.
PREREQUISITE--E. E. 350, 323, CONCURRENT REGISTRATION IN E. E. 356 IS RECOMMENDED.
3 HOURS, OR 3/4 UNIT

04408	DISC	A	10	MTUWTHF	169	E E B
		A	1	W	169	E E B
04416	DISC	B	10	MTUWTHF	260	E E B
		B	1	W	260	E E B

E E 356 MICRO WAVE TECHNIQUES.
PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 352 OR 355.
1 HOUR, OR 0 OR 1/4 UNIT

04424	LAB	A	2-5	TU TH	251	E E B

E E 381 PULSE TECHNIQUES.
PREREQUISITE--E. E. 322, 340, AND 341, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH E. E. 347 AND E. E. 381.
*4 HOURS, OR 0 OR 1 UNIT

04432	DISC	A	10	MTUWTHF	136	E E B
		A	1	W	136	E E B
	LAB	A	2-5	M W	234	E E B

E E 382 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
4 HOURS, OR 1 UNIT

04441	DISC	A	9	MTUWTHF	169	E E B
		A	1	TU	169	E E B
	LAB	A	2-5	TU TH	241	E E B

E E 383 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

04459	DISC	A	9	MTUWTHF	169	E E B
		A	1	TU	169	E E B

E E 388 ELECTRONIC ANALOG COMPUTERS.
PREREQUISITE--E.E. 340, 341, MATH. 345 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 1 UNIT

04467	DISC	A	11	MTUWTHF	170	E E B
		A	1	TH	170	E E B
04475	LAB	M	1-3	TU TH	262	E E B
04483	LAB	N	3-5	TU TH	262	E E B

E E 389 COMMUNICATION DESIGN.
PREREQUISITE--E.E. 342 AND E.E. 350.
3 HOURS, OR 0 OR 3/4 UNIT

04491	DISC	A	8	MTUWTHF	169	E E B
		A	1	M	169	E E B

COURSES FOR GRADUATES

E E 416 ANALYSIS OF LINEAR NETWORKS AND SYSTEMS.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 346 OR 348, E.E. 322 OR EQUIVALENT.
1 UNIT

04504	DISC	A	9	MTUWTHF	141	E E B
		A	1	TU	141	E E B

E E 420 ELECTROMAGNETIC WAVES AND RADIATING SYSTEMS.
PREREQUISITE--E.E. 352.
1 UNIT

04512	DISC	A	8	MTUWTHF	269	E E B
		A	1	M	269	E E B

E E 451 NETWORK SYNTHESIS.
PREREQUISITE--MATH. 345.
1 UNIT

04521	DISC	A	10	MTUWTHF	141	E E B
		A	1	W	141	E E B

E E 498 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN ELECTRICAL ENGINEERING.
1/2 TO 2 UNITS

04539	CONF	ARR

E E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

04547	CONF	ARR

ELEMENTARY EDUCATION

DEPARTMENT OFFICE 306 EDUC

COURSES FOR ADVANCED UNDERGRADUATES

EL ED 230 PRINCIPLES, PROBLEMS AND ISSUES IN ELEMENTARY EDUCATION.
PREREQUISITE--SENIOR STANDING, CONCURRENT REGISTRATION IN
EL. ED. 231 AND ED. PR. 232. SUMMER SESSION-SENIOR STANDING.
2 HOURS

04555	LECT-DISC	9	TUWTHF	120	COM W	RODGERS

EL ED 233 CLASSROOM PROGRAMS IN CHILDHOOD EDUCATION.
PREREQUISITE--JUNIOR STANDING, EL. ED. 236.
2 HOURS

04563	LECT-DISC	10	TUWTHF	25	EDUC	KNOWLES

EL ED 235 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 101, JUNIOR STANDING.
3 HOURS.

04571	LECT-DISC	11	TUWTHF	25	EDUC	RODGERS
	LAB	1-3	W	389	EDUC	

EL ED 236 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--PSYCH. 100, EL. ED. 101.
3 HOURS

04580	LECT	10	TUWTHF	11	COM W	THOMAS
	LAB	1-3	TU TH	11	COM W	

EL ED 237 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--EL. ED. 236, CONCURRENT REGISTRATION IN EL. ED. 233.
3 HOURS

04598	LECT	8	TUWTHF	96	COM W	THOMAS
	LAB	1-3	TU TH	10	EDUC	

EL ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE
POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES
THE WORK.
2 HOURS

04601	CONF	ARR	STAFF

EL ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

04619	CONF	ARR	STAFF

EL ED 292 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

04627	CONF	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

EL ED 335 SCIENCE IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 233 AND 237, OR EQUIVALENT, TWO YEARS OF COLLEGE SCIENCE.
3 HOURS, OR 1/2 UNIT

04635	LECT	10	TUWTHF	4G	EDUC	CHENEY
	LAB	ARR				

EL ED 336 PRIMARY READING.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 UNIT

04643	LECT-DISC A	8	TUWTHF	2	EDUC	MOORE
04651	LECT-DISC B	9	TUWTHF	192	EDUC	LANGSTON

EL ED 337 ART EDUCATION IN THE ELEMENTARY SCHOOL.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 UNIT

04660	LECT-DISC B	9	TUWTHF	106	F A B	SMITH
04678	LECT-DISC D	11	TUWTHF	106	F A B	LANSING

COURSES FOR GRADUATES

EL ED 431 ELEMENTARY SCHOOL CLASSROOM PROGRAMS.
1 UNIT
*SECTION A MEETS LAST FOUR WEEKS ONLY.

04686	LECT-DISC A	8-10	TUWTHF	33	EDUC	MANOLAKES
04694	LECT-DISC B	9	TUWTHF	153	ARMORY	BISHOP
04707	LECT-DISC C	10	TUWTHF	192	EDUC	BARNES
04715	LECT-DISC D	11	TUWTHF	430	ARMORY	

EL ED 433 CURRICULUM PROBLEMS AND TRENDS IN SPECIAL FIELDS OF ELEMENTARY EDUCATION.
PREREQUISITE--FOR ALL SECTIONS, EL. ED. 431 OR 434 OR CONSENT OF INSTRUCTOR--LANGUAGE ARTS SECTIONS, EL. ED. 336 OR A COURSE IN THE TEACHING OF READING OR LANGUAGE ARTS, OR CONSENT OF INSTRUCTOR--CREATIVE ARTS SECTION, EL. ED. 337 OR CONSENT OF INSTRUCTOR--SCIENCE SECTION, EL. ED. 335 OR A METHODS COURSE IN TEACHING SCIENCE IN THE ELEMENTARY SCHOOL AND TWO YEARS OF COLLEGE SCIENCE, OR CONSENT OF INSTRUCTOR--READING SECTION, EL. ED. 336 OR COURSE IN TEACHING OF READING, OR CONSENT OF INSTRUCTOR--EARLY CHILDHOOLD SECTION, EL. ED. 434, OR CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION A IS FOR LANGUAGE ARTS *SECTION C IS FOR ARITHMETIC
*SECTION D IS FOR SCIENCE *SECTION F IS FOR READING
*SECTION G IS FOR EARLY CHILDHOOD
*SECTION B IS FOR SOCIAL STUDIES.
*SECTION E IS FOR CREATIVE ARTS.

04723	LECT-DISC A1	10	TUWTHF	146	ARMORY	MOORE
04731	LECT-DISC A2	11	TUWTHF	2	EDUC	DODL
04740	LECT-DISC B	8	TUWTHF	192	EDUC	MCGILL
04758	LECT-DISC B2	11	TUWTHF	241	ARMORY	BISHOP
04766	LECT-DISC C	9	TUWTHF	154	ARMORY	
04774	LECT-DISC E	9	TUWTHF	133	F A B	LANSING
04782	LECT-DISC F	10	TUWTHF	389	EDUC	SHORES

EL ED 434 PROGRAMS IN EARLY CHILDHOOD EDUCATION.
PREREQUISITE--EL. ED. 431.
1 UNIT

04791	LECT-DISC C	11	TUWTHF	43	G H	LANGSTON

EL ED 437 METHODS OF CHILD STUDY.
PREREQUISITE--ED. PSY. 312 OR CONSENT OF INSTRUCTOR.
1 UNIT

04803	LECT-DISC B	9	TUWTHF	332	ARMORY	

EL ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT

04811	LECT-DISC A	8	TUWTHF	130	COM W	SHORES
04820	LECT-DISC B	9	TUWTHF	162	EDUC	BARNES
04838	LECT-DISC C	10	TUWTHF	241	ARMORY	

EL ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

04846	CONF		ARR					GRAD. STAFF

EL ED 455 THEORIES OF ART EDUCATION.
PREREQUISITE--EL. ED. 337 OR SE ED 456, OR CONSENT OF INSTRUCTOR.
1 UNIT

04854	LECT-DISC	D	11	TUWTHF	133	F A B		SMITH

EL ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1 TO 2 UNITS
*SECTION C IS FOR ELEMENTARY STUDENT TEACHING SUPERVISORS AND MEETS FIRST FOUR WEEKS. THIS WORKSHOP IS ESPECIALLY DESIGNED FOR CLASSROOM TEACHERS AND PRINCIPALS WHO WORK WITH OR ARE PLANNING TO WORK WITH STUDENT TEACHERS. THE WORKSHOP WILL FOCUS ON THE IMPROVEMENT OF SUPERVISION THROUGH THE STUDY AND ANALYSIS OF SUPERVISORY ACTIVITIES, I.E., CURRICULUM SUPERVISION, CONFERENCES, DEMONSTRATION TEACHING, AND EVALUATION.
*SECTION D IS FOR ARITHMETIC AND MEETS FIRST FOUR WEEKS. THIS WORKSHOP FOCUSES ON MODERN DEVELOPMENTS IN THE ELEMENTARY SCHOOL ARITHMETIC PROGRAM AND THE IMPROVEMENT OF TEACHING OF ARITHMETIC. BASIC MATHEMATICAL UNDERSTANDINGS AND CONCEPTS FOR IMPROVED TEACHING METHODS AND MATERIALS WILL BE STRESSED.
*SECTION G IS RESTRICTED TO STUDENTS ENROLLED IN THE NDEA INSTITUTE FOR ADVANCED STUDY OF DISADVANTAGED YOUTH. MEETS FROM JUNE 21 THROUGH AUGUST 12.

04862	LECT-DISC	*C	9-1130	TUWTHF	385	EDUC		MANOLAKES
		*C	130-3	TUWTHF	385	EDUC		MANOLAKES
04871	LECT-DISC	*D	9-1130	TUWTHF	432	ARMORY		C PHILLIPS
		*D	130-3	TUWTHF	432	ARMORY		C PHILLIPS
04889	LECT-DISC	*G	8-12	TUWTHF		ARR		SPODEK
		*G	1-4	TUWTHF		ARR		

EL ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

04897	CONF		ARR					GRAD. STAFF

EL ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

04900	CONF		ARR					GRAD. STAFF

EL ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

04918	CONF		ARR					GRAD. STAFF

ENGLISH LITERATURE AND AMERICAN LITERATURE

DEPARTMENT OFFICE 100 E B

MAJOR--A COURSE IN SHAKESPEARE AND TWENTY ADDITIONAL HOURS IN ENGLISH, EXCLUDING ENGLISH 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND RHETORIC 101, 102, 107, 108, 151, 200, 271, 272. OF THESE TWENTY ADDITIONAL HOURS, SEVENTEEN MUST BE TAKEN IN ENGLISH OR AMERICAN LITERATURE, INCLUDING THREE HOURS FROM EACH OF THE FOLLOWING GROUPS--1.-AMERICAN LITERATURE-ENGLISH 255, 256-A STUDENT WHO HAS CREDIT FOR BOTH ENGLISH 113 AND 114 MAY OFFER ENGLISH 272, 273, 287, 288, 316, 352, 353, 354, 359, 375, 376, 377, OR 380. 2.-ENGLISH LITERATURE PRIOR TO 1616, ENGLISH 221, 235, 311, 325, 326, OR 336. 3.-ENGLISH LITERATURE FROM 1616 TO 1800, ENGLISH 245, 342, 345, 346, 348, OR 349. 4.-ENGLISH LITERATURE FROM 1800 TO THE PRESENT, ENGLISH 246, 263, 264, 281, 282, 283, OR 284.

FOR UNDERGRADUATE STUDENTS WHO CONTEMPLATE TAKING ADVANCED WORK OR ARE MAJORING IN ENGLISH, THE FOLLOWING SEQUENCES OF COURSES ARE SUGGESTED. FRESHMAN YEAR, FIRST SEMESTER, ENGLISH 101 OR RHETORIC 107-SECOND SEMESTER, ENGLISH 102 OR 103 OR RHETORIC 108. SOPHOMORE YEAR, FIRST SEMESTER, ENGLISH 105 OR ENGLISH 121-SECOND SEMESTER ENGLISH 106 OR ENGLISH 122. ENGLISH 101 AND EITHER 102 OR 103, OR RHETORIC 107 AND 108 ARE THE NORMAL PREREQUISITE TO THE ENGLISH MAJOR. IF NECESSARY, ENGLISH 101, 102, OR 103 MAY BE TAKEN CONCURRENTLY WITH ADVANCED COURSES. IN EXCEPTIONAL CASES, ENGLISH 105 AND 106 OR ENGLISH 121 AND 122 MAY BE ACCEPTED AS ALTERNATIVE PREREQUISITES TO THE MAJOR.

MINORS--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, ECONOMICS, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POL. SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC-NOT INCLUDING APPLIED MUSIC-COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THEIR DEPARTMENTS EXCEPT FRENCH 103, 104, GERMAN 103, 104, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103, 104. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED.
STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

ENGLISH MAJORS WHO INTEND TO TEACH IN SECONDARY SCHOOLS MUST SEE THE ADVISER ON SPECIAL CURRICULA.

DEPARTMENTAL HONORS PROGRAM AND DISTINCTION--
THE ENGLISH DEPARTMENT OFFERS FIVE SPECIAL COURSES, 197, 295, 296, 297, 298, WHICH CONSTITUTE THE HONORS PROGRAM. A FULL DESCRIPTION OF THIS PROGRAM MAY BE OBTAINED FROM THE DEPARTMENTAL OFFICES, THE DEPARTMENTAL DIRECTOR OF HONORS, OR FROM ANY MAJOR ADVISOR. A STUDENT MAJORING IN ENGLISH WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT OF 4.0 OR BETTER MAY EARN DISTINCTION ONLY BY SUCCESSFULLY COMPLETING ENGLISH 297, 298, AND ANY TWO OF THE OTHER THREE-197, 295, 296- HONORS SEMINARS IN ADDITION TO THE OTHER REMAINING REGULAR REQUIREMENTS FOR HIS MAJOR. A STUDENT ENROLLED IN THE TEACHER EDUCATION CURRICULUM MAY EARN DISTINCTION BY SUBSTITUTING ENGLISH 197 FOR ENGLISH 297 AND BY TAKING ENGLISH 298 DURING WHICHEVER SEMESTER OF HIS SENIOR YEAR HE IS ON CAMPUS THE FULL TIME.

THE LEVEL OF DISTINCTION-HIGHEST, HIGH, DISTINCTION-IS DETERMINED BY THE HONORS COMMITTEE, THE INSTRUCTORS IN THE HONORS SEMINARS, THE ENGLISH 298 TUTOR, AND SUCH OTHER FACULTY MEMBERS AS MAY BE ASKED TO READ THE HONORS ESSAY. TO RECEIVE HIGHEST DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE POINT AVERAGE OF 4.75 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR-TO RECEIVE HIGH DISTINCTION, HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.5. IF, IN THE OPINION OF THOSE DESIGNATED TO DETERMINE THESE MATTERS, A CANDIDATE FAILS TO EARN ANY KIND OF DISTINCTION, HE WILL STILL RECEIVE CREDIT FOR THE HONORS COURSES HE HAS TAKEN.

COURSES FOR UNDERGRADUATES

ENGL 101 INTRODUCTION TO POETRY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

04926	LECT-DISC	A	8	MTUWTHF	137	ADMIN	HOMAN
		A	12	W	137	ADMIN	

ENGL 102 INTRODUCTION TO THE DRAMA.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

04934	LECT-DISC	B	9	MTUWTHF	137	ADMIN	HOMAN
		B	12	M	137	ADMIN	

ENGL 103 INTRODUCTION TO FICTION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

04942	LECT-DISC	C	10	MTUWTHF	140	ADMIN		DUSSINGER
		C	12	TH	140	ADMIN		
04951	LECT-DISC	D	11	MTUWTHF	215	G H		DUSSINGER
		D	12	F	215	G H		

ENGL 113 CLASSIC AMERICAN AUTHORS BEFORE THE CIVIL WAR.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 113 IN ADDITION TO ENGL. 255.
*3 HOURS

04969	LECT-DISC	D	11	MTUWTHF	140	ADMIN		WHISNANT
		D	12	F	140	ADMIN		

ENGL 114 CLASSIC AMERICAN AUTHORS AFTER THE CIVIL WAR TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 114 IN ADDITION TO ENGL. 256.
*3 HOURS

04977	LECT-DISC	A	8	MTUWTHF	140	ADMIN		KINNAMON
		A	12	W	140	ADMIN		
04985	LECT-DISC	B	9	MTUWTHF	140	ADMIN		KINNAMON
		B	12	M	140	ADMIN		

ENGL 122 CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 122 IN ADDITION TO ENGL. 106.
*3 HOURS

04993	LECT-DISC	E	1	MTUWTHF	140	ADMIN		KORAL
		E	12	TU	140	ADMIN		

ENGL 123 CHIEF MODERN ENGLISH WRITERS.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

05008	LECT-DISC	C	10	MTUWTHF	142	ADMIN		DERUS
		C	12	TH	142	ADMIN		

ENGL 131 INTRODUCTION TO SHAKESPEARE.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102. OR DESIGNATION AS AN EDMUND J. JAMES SCHOLAR.
3 HOURS

05016	LECT-DISC	F	2	MTUWTHF	142	ADMIN		WELSH
		F	3	M	142	ADMIN		

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 245 ENGLISH LITERATURE FROM 1688 TO 1789.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

05024	LECT-DISC	E	1	MTUWTHF	149	ADMIN		SANDERS
		E	12	TU	149	ADMIN		

ENGL 246 THE ENGLISH RUMANTIC POETS.
3 HOURS

05032	LECT-DISC	A	8	MTUWTHF	142	ADMIN		HOGAN
		A	12	W	142	ADMIN		

ENGL 252 GREAT ENGLISH NOVELISTS OF THE NINETEENTH CENTURY.
3 HOURS

05041	LECT-DISC	F	2	MTUWTH	149	ADMIN		STOTTLAR

ENGL 255 SURVEY OF AMERICAN LITERATURE, I.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 113 AND 255.
*3 HOURS

05059	LECT-DISC	C	10	MTUWTHF	149	ADMIN		HASKELL
		C	12	TH	149	ADMIN		

ENGL 256 SURVEY OF AMERICAN LITERATURE, II.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 114 AND 256.
*3 HOURS

05067	LECT-DISC	A	8	MTUWTHF	149	ADMIN	HAMILTON
		A	12	W	149	ADMIN	

ENGL 257 SURVEY OF ENGLISH LITERATURE, I.
PREREQUISITE--SENIOR STANDING.
3 HOURS

05075	LECT-DISC	D	11	MTUWTHF	149	ADMIN	PRESCOTT
		D	12	F	149	ADMIN	

ENGL 258 SURVEY OF ENGLISH LITERATURE,II.
PREREQUISITE--SENIOR STANDING.
3 HOURS

05083	LECT-DISC	B	9	MTUWTHF	142	ADMIN	MAJDIAK
		B	12	M	142	ADMIN	

ENGL 264 VICTORIAN LITERATURE FROM 1859 TO 1901.
3 HOURS

05091	LECT-DISC	B	9	MTUWTHF	149	ADMIN	KRAMER
		B	12	M	149	ADMIN	

ENGL 283 ENGLISH LITERATURE IN THE TWENTIETH CENTURY, I.
3 HOURS

05104	LECT-DISC	C	10	MTUWTHF	137	ADMIN	FRAYNE
		C	12	TH	137	ADMIN	

ENGL 284 ENGLISH LITERATURE IN THE TWENTIETH CENTURY, II.
3 HOURS

05112	LECT-DISC	B	9	MTUWTHF	152	ADMIN	MARDER
		B	12	M	152	ADMIN	

ENGL 286 THE SHORT STORY, II.
PREREQUISITE--ONE COURSE IN ENGLISH OR AMERICAN LITERATURE.
3 HOURS

05121	LECT-DISC	C	10	MTUWTHF	215	G H	FUMENTO
		C	12	TH	215	G H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 345 THE METAPHYSICAL POETS.
3 HOURS, OR 3/4 UNIT

05139	LECT-DISC	E	1	MTUWTHF	152	ADMIN	ORNSTEIN
		E	12	TU	152	ADMIN	

ENGL 378 MODERN AMERICAN AND BRITISH FICTION IN ITS EUROPEAN BACKGROUND
PREREQUISITE--TWO COLLEGE-LEVEL LITERATURE COURSES.
3 HOURS OR 3/4 UNIT

05147	LECT-DISC	B	9	MTUWTHF	154	ADMIN	SIMON
		B	12	M	154	ADMIN	

ENGL 385 THEMES AND MOVEMENTS IN AMERICAN LITERATURE.
3 HOURS, OR 3/4 UNIT

05155	LECT-DISC	C	10	MTUWTHF	152	ADMIN	
		C	12	TH	152	ADMIN	

COURSES FOR GRADUATES

ENGL 403 HISTORY OF THE ENGLISH LANGUAGE.
1 UNIT

05163	LECT-DISC	D	11	MTUWTHF	152	ADMIN	CAMPBELL
		D	12	F	152	ADMIN	

ENGL 413 STUDIES IN SHAKESPEARE.
1 UNIT

05171	LECT-DISC	F	2	MTUWTH	152	ADMIN	ORNSTEIN

ENGL 428 STUDIES IN THE ROMANTIC MOVEMENT, II.
1 UNIT

05180	LECT-DISC	G	3-5	TU TH	152	ADMIN	WILKIE

ENGL 431 STUDIES IN VICTORIAN LITERATURE I.
1 UNIT
05198 LECT-DISC V 7-9PM TU TH 152 ADMIN SMALLEY

ENGL 438 STUDIES IN AMERICAN LITERATURE AFTER 1800.
PREREQUISITE--SURVEY COURSE IN AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
1 UNIT
05201 LECT-DISC D 11 MTUWTH 137 ADMIN

ENGL 446 INTRODUCTION TO ADVANCED GRADUATE STUDY.
REQUIRED OF ALL CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGLISH.
1/4 UNIT
05219 LECT-DISC G 3-5 W 152 ADMIN WASSON

ENGL 491 RESEARCH IN SPECIAL TOPICS.
*THIS COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS
*1 UNIT
05227 CONF ARR 102B E B HAIG

ENGL 497 INDEPENDENT READING.
PREREQUISITE--CONSENT OF INSTRUCTOR OF REQUISITE 300 LEVEL COURSE.
*STUDENTS MAY ACCUMULATE 1/2 UNIT.
*1/4 UNIT
05235 CONF ARR

ENGL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
INSTRUCTORS-ALTENBERND, BARKER, DAVIDSON, EVANS, FLANAGAN, GETTMANN, HAIG, HERRICK, HOLADAY, HOOK, LYNEN, MCBURNEY, MILLIGAN, PAUL, ROGERS, SCOTT, SHATTUCK, SMALLEY, STILLINGER, STILLWELL, AND WILSON.
05243 CONF ARR

ENTOMOLOGY

DEPARTMENT OFFICE 320 MOR HALL

MAJOR--TWENTY HOURS IN ENTOMOLOGY, EXCLUDING ENTOM. 101, 103, AND 131. ZOOL. 318 AND 321 MAY BE APPLIED FOR MAJOR CREDIT. AT LEAST FIVE HOURS MUST BE TAKEN FROM THE ADVANCED GROUP.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--AGRONOMY, BOTANY, CHEMISTRY, HORTICULTURE, MICROBIOLOGY, PHYSIOLOGY, AND ZOOLOGY.

AS A GENERAL POLICY, STUDENTS WHO CONTEMPLATE EVENTUAL CAREERS IN ENTOMOLOGY ARE URGED TO USE THE UNDERGRADUATE YEARS TO GAIN THOROUGH GROUNDING IN THE FUNDAMENTALS OF PHYSICAL AND BIOLOGICAL SCIENCE, IN MATHEMATICS AND THE OTHER LIBERAL ARTS, AND IN THE TECHNIQUES OF COMMUNICATION. THE DEPARTMENT IS GLAD TO ADVISE STUDENTS IN REGARD TO THE MOST EFFECTIVE SCHEDULE OF STUDY TO SUIT THEIR PARTICULAR NEEDS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENTOM 306 SPECIAL PROBLEMS.
PREREQUISITE--ANY OF THE FOLLOWING--ENTOM. 131, 301, 302, 317, 319, 322, OR ZOOL. 101 OR 321, SENIOR STANDING.
2 TO 5 HOURS, OR 1/4 OR 1 UNIT
05251 CONF ARR STAFF

ENTOM 312 ENTOMOLOGY FOR TEACHERS.
PREREQUISITE--ONE YEAR OF BIOLOGY, BOTANY, ZOOLOGY OR EQUIVALENT.
FIELD TRIPS.
3 HOURS, OR 1/2 UNIT
05260 LAB-DISC A 10-12 MTUW F 310 H H WALDBAUER

COURSES FOR GRADUATES

ENTOM 499 THESIS--RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--MORPHOLOGY AND EMBRYOLOGY OF INSECTS	CHADWICK, LARSEN, STERNBURG
B--APPLIED ENTOMOLOGY	HORSFALL, KEARNS
C--SYSTEMATIC ENTOMOLOGY	ROSS, SELANDER
D--BIOLOGY AND ECOLOGY OF INSECTS	GHENT, HORSFALL, JAYCOX
E--INSECT PHYSIOLOGY & TOXICOLOGY	CHADWICK, FRAENKEL, FRIEDMAN, KEARNS, LARSEN STERNBURG, WALDBAUER

05278 LAB ARR

FINANCE

DEPARTMENT OFFICE 311 D K H

REQUIREMENTS FOR L. A. S. STUDENTS
MAJOR--TWENTY HOURS IN FINANCE. A FINANCE MAJOR WHO CHOOSES ECONOMICS AS A MINOR MUST INCLUDE ALSO TWELVE HOURS IN A SECOND MINOR.

ECON. 108 OR ECON. 102 AND 103, ARE FUNDAMENTAL COURSES IN ECONOMICS AND ARE PREREQUISITES FOR COURSES IN FINANCE. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN FINANCE SHOULD TAKE ECON. 108, OR ECON. 102 AND 103, IN THEIR SOPHOMORE YEAR. LIBERAL ARTS MAJORS IN FINANCE ARE ADVISED STRONGLY TO ELECT ACCY. 201 AND A COURSE IN STATISTICS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES IS ACCEPTED AS A MINOR.

COURSES FOR UNDERGRADUATES

FIN 150 MONEY, CREDIT, AND BANKING.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS

05286	LECT-DISC	C	10	MTUWTHFS	28	COM W		PATTERSON

COURSES FOR ADVANCED UNDERGRADUATES

FIN 253 INVESTMENT BANKING.
PREREQUISITE--FIN. 150 AND 254.
3 HOURS

05294	LECT-DISC	B	9	MTUWTHFS	166	COM W		CAMMACK

FIN 254 BUSINESS FINANCE.
PREREQUISITE--ACCY. 105 OR 201, FIN. 150.
CREDIT OR REGISTRATION IN ECON. 172.
3 HOURS

05307	LECT-DISC	A	8	MTUWTHFS	166	COM W		PATTERSON
05315	LECT-DISC	D	11	MTUWTHFS	28	COM W		WAGNER

FIN 262 LIFE INSURANCE.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS

05323	LECT-DISC	D	11	MTUWTHFS	166	COM W		CAMMACK

FIN 294 SENIOR RESEARCH.
PREREQUISITE--SENIOR STANDING.
*2 TO 4 HOURS

05331	CONF		ARR					MAYER

COURSES FOR GRADUATES

```
FIN   456     INVESTMENT.
         1 UNIT
      05340      LECT-DISC  A        8-10     M   TH      28  COM W          MAYER

FIN   490     INDIVIDUAL STUDY AND RESEARCH.
         1/2 TO 1 UNIT
      05358      CONF               ARR                                       MAYER

FIN   499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
      05366      LECT-DISC  QTH      4-6          TH      28  COM W          MAYER
```

FOOD SCIENCE
INCLUDING DAIRY TECHNOLOGY

FOOD SCIENCE

DEPARTMENT OFFICE 213 M H

COURSES FOR GRADUATES

```
F S   481     ADVANCED STUDIES IN FOOD SCIENCE.
         1/2 TO 2 UNITS
      05374      CONF               ARR                                       STAFF

F S   499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
      05382      CONF               ARR                                       STAFF
```

DAIRY TECHNOLOGY

OFFICE 104 D M B

NOTE--ALL STUDENTS SPECIALIZING IN DAIRY TECHNOLOGY ARE EXPECTED TO TAKE AN INSPECTION TRIP EITHER IN THE JUNIOR OR SENIOR YEAR. THIS TRIP COSTS THE STUDENT ABOUT $20.

COURSES FOR GRADUATES

```
D T   491     ASSIGNED PROBLEMS IN DAIRY TECHNOLOGY.
         PREREQUISITE--GRADUATE STANDING IN DAIRY TECHNOLOGY.
         1/2 TO 2 UNITS
      05391      CONF               ARR                                       STAFF

D T   499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
      05403      CONF               ARR                                       STAFF
```

FORESTRY

DEPARTMENT OFFICE 219 M H

COURSES FOR ADVANCED UNDERGRADUATES

THE FORESTRY COURSES FOR ADVANCED UNDERGRADUATES ARE DESIGNED PRIMARILY FOR STUDENTS WHO ARE CANDIDATES FOR THE PROFESSIONAL DEGREE OF BACHELOR OF SCIENCE IN FORESTRY IN EITHER THE FOREST PRODUCTION OR WOOD TECHNOLOGY AND UTILIZATION CURRICULUM. OTHER STUDENTS ARE ADMITTED TO MOST OF THESE COURSES, HOWEVER, IF THEY HAVE THE PREREQUISITES OR THE CONSENT OF THE INSTRUCTOR.

FOR 211 INTRODUCTION TO SILVICS AND SILVICULTURE--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
05411 CONF ARR BOGGESS AND LORENZ

FOR 221 FOREST MENSURATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
05420 CONF ARR JOKELA

FOR 231 WOOD UTILIZATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
2 HOURS
05438 CONF ARR WALTERS

COURSES FOR GRADUATES

FOR 401 SPECIAL PROBLEMS.
*NOT MORE THAN ONE UNIT MAY BE OFFERED TOWARD AN M.S. DEGREE.
*1/2 OR 1 UNIT
05446 CONF ARR GRADUATE STAFF

FOR 499 THESIS RESEARCH.
1 TO 3 UNITS
05454 CONF ARR GRADUATE STAFF

FRENCH

DEPARTMENT OFFICE 244 L H

MAJOR--TWENTY HOURS IN FRENCH, EXCLUDING FRENCH 101, 102, 103, 104, 113, AND INCLUDING FR. 201, 202, 211, 212 AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, NOT LESS THAN FOUR OF THESE HOURS TO BE IN LITERATURE. STUDENTS ARE ALSO STRONGLY ADVISED TO TAKE A YEARS WORK--TWO COURSES IN EUROPEAN HISTORY AND A YEARS WORK--TWO COURSES--IN ENGLISH LITERATURE. COURSES PARTICULARLY SUITABLE FOR THIS PURPOSE ARE--HIST. 111-112, 309-310, 311-312, 313-314, 323-324. ENGL. 101, 102, 103, 105, 106, 121, 122, 123, 131, 231, 232, 245, 246, 251, 252, 253, 257, 258, 263, 264, 281, 282, 283, 284. HUMAN. 363, 364.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH SUBJECT IF TWO ARE CHOSEN--EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR UNDERGRADUATES

FR 101 ELEMENTARY COURSE, I.
FOR STUDENTS WHO HAVE NO CREDIT IN FRENCH.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR FR. 101 WITHOUT FR. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,

05462	LECT-DISC		10-12	MTU THF	336	G H	NOLAN

FR 102 ELEMENTARY COURSE, II.
PREREQUISITE--FR. 101 OR ONE YEAR OF HIGH SCHOOL FRENCH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,

05471	LECT-DISC	A1	8-10	MTU THF	330	ARMORY	GREENLEE
05489	LECT-DISC	A2	8-10	MTU THF	331	ARMORY	SMART

FR 103 MODERN FRENCH, I.
PREREQUISITE--FR. 102 OR TWO YEARS OF HIGH SCHOOL FRENCH.
4 HOURS

05497	LECT-DISC	C1	10-12	MTU THF	327	G H	SHINALL
05500	LECT-DISC	C2	10-12	MTU THF	329	G H	REISS

FR 104 MODERN FRENCH, II.
PREREQUISITE--FR. 103 OR THREE YEARS OF HIGH SCHOOL FRENCH.
4 HOURS

05518	LECT-DISC		1-3	MTU THF	325	G H	PORTER

COURSES FOR ADVANCED UNDERGRADUATES

FR 201 INTRODUCTION TO FRENCH LITERATURE, I.
PREREQUISITE--FR. 104 OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS

05526	LECT-DISC		1-3	M W F	327	G H	SHINALL

FR 211 ORAL FRENCH, I
PREREQUISITE--FR. 104, OR 103 AND 113, OR FOUR YEARS OF HIGH SCHOOL FRENCH. PRACTICE IN LANGUAGE LABORATORY IS REQUIRED.
3 HOURS

05534	LECT-DISC	C1	10-12	M W F	330	ARMORY	BENOUIS
05542	LECT-DISC	C2	10-12	M W F	331	ARMORY	VALETTE

FR 212 ORAL FRENCH, II
PREREQUISITE--FR. 211. WITH PERMISSION, FR. 212 MAY BE TAKEN WITH 211 IN THE SUMMER SESSION.
3 HOURS

05551	LECT-DISC		1-3	M W F	336	G H	BETTS

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED UNDERGRADUATE COURSES IN FRENCH EXCEPT FR. 382 HAVE THE FOLLOWING PREREQUISITE--FR. 201 AND 202 OR EQUIVALENT.

FR 309 SURVEY OF FRENCH LITERATURE, I.
3 HOURS, OR 3/4 OR 1 UNIT

05569	LECT-DISC		8-10	M W F	336	G H	BARRETTE

FR 314 SYNTAXE FRANCAISE AVANCEE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT OF CREDIT

05577	LECT-DISC		1-3	M W F	329	G H	NACHTMANN

FR 318 LE THEATRE FRANCAIS DEPUIS 1800, II.
3 HOURS - 3/4 UNIT

05585	LECT-DISC		3-5	W F	329	G H	JAHIEL

```
FR    336     CIVILISATION FRANCAISE, II.
        3 HOURS - 3/4 UNIT
      05593       LECT-DISC            3-5      MTU TH       3  G H            MAINOUS

FR    382     LANGUAGE LABORATORY TECHNIQUES.
              SAME AS GER., RUSS., AND SPAN. 382.
        PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE
        COLLEGE LEVEL, OR THE EQUIVALENT.
        2 HOURS, OR 1/2 UNIT
      05606       LECT-DISC           10        MTUWTH     232  L H            MYERS
```

COURSES FOR GRADUATES

```
FR    400     BEGINNING FRENCH FOR GRADUATE STUDENTS.
        4 HOURS, NO GRADUATE CREDIT
      05614       LECT-DISC  A1        8-10     MTU THF    327  G H            BAKER
      05622       LECT-DISC  A2        8-10     MTU THF    329  G H            GOLDSTEIN
      05631       LECT-DISC  A3        8-10     MTU THF    232  L H            NOLAN
      05649       LECT-DISC  C        10-12     MTU THF    331  G H            TRAIL
      05657       LECT-DISC  G         3-5      MTU THF    331  G H            BRADY

FR    401     READING FRENCH FOR GRADUATE STUDENTS.
        PREREQUISITE--FR. 400, OR FR. 101 AND 102, OR EQUIVALENT.
        4 HOURS, NO GRADUATE CREDIT
      05665       LECT-DISC  A         8-10     MTU THF    331  G H            NACHTMANN
      05673       LECT-DISC  C        10-12     MTU THF    325  G H            HARRIS
      05681       LECT-DISC  G         3-5      MTU THF    336  G H            HARRIS

FR    425     EXPLICATION DE TEXTES, I.
        PREREQUISITE--GRADUATE STANDING IN FRENCH.
        1 UNIT
      05690       LECT-DISC            1-3       TU TH     329  G H            JAHIEL

FR    460     SEMINAR IN FRENCH LITERATURE.
        *COURSE MAY BE REPEATED FOR CREDIT.
        *1 UNIT
        FOR 1966--READINGS IN OLD FRENCH TEXTS.
      05702       LECT-DISC            8-10      TU TH     325  G H            BARRETTE

FR    491     INDIVIDUAL TOPICS.
        PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN FRENCH.
        1/4 TO 1 UNIT
      05711       CONF               ARR

FR    499     THESIS RESEARCH.
        0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
      05729       CONF               ARR
```

GENERAL EDUCATION

STUDENTS WHO ENTER THE GENERAL CURRICULUM IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES OR WHO ENTER OTHER SCHOOLS AND SUBSEQUENTLY TRANSFER TO THE COLLEGE ARE REQUIRED TO COMPLETE AT LEAST ONE APPROVED SEQUENCE IN EACH OF THESE AREAS--HUMANITIES, BIOLOGICAL SCIENCE, PHYSICAL SCIENCE, AND SOCIAL SCIENCE.

THE FOLLOWING REGULATIONS APPLY TO THE FOREGOING SEQUENCES--

1--STUDENTS MUST COMPLETE AT LEAST ONE OF THESE SEQUENCES DURING THE FIRST YEAR OF STUDY.

2--STUDENTS WITH SOPHOMORE STANDING MUST COMPLETE AT LEAST ONE ADDITIONAL SEQUENCE DURING THE SECOND YEAR.

3--SOME OF THE SEQUENCES ARE AT THE ADVANCED LEVEL AND REQUIRE AT LEAST JUNIOR STANDING. SUCH COURSES COUNT TOWARD ADVANCED HOURS REQUIRED FOR GRADUATION.

4--A STUDENT NEED NOT SATISFY A SEQUENCE IN THE AREA IN WHICH HIS MAJOR DEPARTMENT IS CLASSIFIED. FOR EXAMPLE, IF HIS MAJOR IS CHEMISTRY, THE STUDENT DOES NOT TAKE A GENERAL EDUCATION SEQUENCE IN PHYSICAL SCIENCE. IF HIS MAJOR IS ENGLISH, THEN NO OTHER SEQUENCE IS REQUIRED IN HUMANITIES. THE SAME IS TRUE FOR OTHER AREAS. CONSEQUENTLY, A FRESHMAN SHOULD ENROLL IN A SEQUENCE WHICH DOES NOT DUPLICATE HIS INTENDED MAJOR, AND FINAL DECISION ON THE MAJOR FIELD SHOULD BE MADE AT THE BEGINNING OF THE SOPHOMORE YEAR IF POSSIBLE.

5--IN SO FAR AS POSSIBLE, THE SEQUENCES SHOULD BE CHOSEN FROM COURSES APPROVED BY THE COLLEGE. AUTHORITY FOR SUBSTITUTIONS IN THE SEQUENCE REQUIREMENTS MUST BE OBTAINED FROM ONE OF THE DEANS. THE FOLLOWING HAVE BEEN APPROVED.

BIOLOGICAL SCIENCE

D G S 131, 132
PHYSL 103 OR 203, PSYCH 103
OR 8 HOURS IN ANY TWO OF THE FOLLOWING--

BOT 100	PHYSL 103 OR 203
ENTOM 103	ZOOL 104
MCBIO 100 AND 101	

HUMANITIES

A SIX HOUR SEQUENCE IN ONE FOREIGN LITERATURE AT THE 200 AND 300 LEVEL--NOT LANGUAGE COURSES.

ART 111, 112, PLUS EITHER A 300 COURSE IN HISTORY OF ART OR PHIL 323	HIST 131, 132
CLCIV 301, 302	HIST 323, 324
D G S 161, 162	HUMAN 151, 152
ENGL 101, 102, 103	HUMAN 211, 212
	HUMAN 215, 216
ENGL 105, 106	HUMAN 363, 364
ENGL 121, 122, 123	MUSIC 130, 131 PLUS
ENGL 251, 252, 253, 287	EITHER 312 OR 313
ANY TWO OR THREE OF THE FOUR COURSES, 6 OR 9 HOURS--	PHIL 101, 102, 105
	PHIL 303, 306
ENGL 338, 339, 340--ANY TWO OR ALL THREE COURSES, 6 OR 9 HOURS--	RUSS 309, 310--6 HOURS--
	SPEECH 177, 178

PHYSICAL SCIENCE

ASTR 101, 102	GEOG 101, 111
	GEOL 101, 102
CHEM, ANY 8 HOURS	MATH 118, 119 OR ANY OTHER 8 HOUR SEQUENCE NOT INCLUDING MATH. 118.
D G S 141, 142	PHYCS, ANY 8 HOURS

SOCIAL SCIENCE

ANTH 102, 103	HIST 151, 152
D G S 121, 122	HIST 260, 261, 262
D G S 151, 152	PHIL 103, 104
D G S 171, 172	POL S 184, 191
ECON 108, 255	POL S 191, 192
ECON 108, 218	PSYCH 100, 101
GEOG 104, 105	SOC 100, 218
HIST 111, 112	SOC 104, 105

A STUDENT MAY NOT USE MORE THAN ONE SEQUENCE FROM ANY ONE DEPARTMENT TO SATISFY THE GENERAL EDUCATION REQUIREMENTS.

A STUDENT MAY NOT USE MORE THAN ONE SIX-HOUR OR SEVEN-HOUR SEQUENCE TO SATISFY THE GENERAL EDUCATION REQUIREMENTS.

ANY STUDENT WHO HAS COMPLETED THE SIX COURSES PRESCRIBED BY THE DIVISION OF GENERAL STUDIES HAS SATISFIED ALL THE GENERAL EDUCATION SEQUENCE REQUIREMENTS IN THE SCIENCES AND LETTERS CURRICULUM.

GENERAL ENGINEERING

DEPARTMENT OFFICE 117 T B

SPECIAL SUMMER COURSE FOR HIGH SCHOOL STUDENTS

G E 010 SUMMER SCIENCE TRAINING PROGRAM FOR HIGH SCHOOL STUDENTS. THIS PROGRAM IS DESIGNED TO FAMILIARIZE SELECTED HIGH SCHOOL STUDENTS WITH PAST ACHIEVEMENTS, CURRENT RESEARCH AND PRACTICE, AND FUTURE NEEDS IN SCIENCE AND ENGINEERING. ENROLLMENT IS LIMITED TO SUCCESSFUL APPLICANTS TO A 6 WEEK SUMMER SCIENCE TRAINING PROGRAM SPONSORED BY THE NATIONAL SCIENCE FOUNDATION TO BE HELD FROM JUNE 27 TO AUGUST 5. NO CREDIT.

05737	LAB-DISC	A	8-12	MTUWTHF	216	T B	DOBROVOLNY,
		A	1-4	MTUWTHF	216	T B	REYES-GUERRA
		A	8-12	MTUWTHF	201	T B	AND OTHERS
		A	1-4	MTUWTHF	201	T B	

COURSES FOR UNDERGRADUATES

G E 103 ENGINEERING GRAPHICS, I.
CREDIT IS NOT GIVEN FOR G.E. 103 IN ADDITION TO G.E. 101 OR G.E.105
3 HOURS

05745	LAB-DISC	A11	7-9	MTUWTHFS	114	T B
05753	LAB-DISC	B11	10-12	MTUWTHFS	114	T B

COURSES FOR ADVANCED UNDERGRADUATES

G E 220 HISTORY OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS

05761	LECT-DISC	E	1-220	MTU THF	139	P B

G E 293 SPECIAL PROBLEMS.
PREREQUISITE--JUNIOR STANDING AND CONSENT OF INSTRUCTOR.
1 TO 4 HOURS
*SECTION A IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. SECTION A COVERS APPLIED MATHEMATICS FOR MECHNICAL SYSTEMS. CREDIT-4 HOURS.

05770	LECT-DISC	*A	10	M W F	136	P B	PLACEK
		*A	1	TU TH	136	P B	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

G E 393 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 TO 1 UNIT
*SECTIONS A AND S ARE RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATIONS FOR INSTURCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA.
SECTION A COVERS APPLIED MATHEMATICS FOR ELECTRICAL SYSTEMS.
CREDIT--4 HOURS OR 1 UNIT.
SECTION S IS A TECHNICAL EDUCATION SEMINAR.
CREDIT--1 HOUR OR 1/4 UNIT.

05788	LECT-DISC	*A	11	M W F	136	P B	PLACEK
		*A	2	TU TH	136	P B	
05796	LECT-DISC	*S	10-12	TU TH	144	P B	DOBROVOLNY AND OTHERS

GEOGRAPHY

DEPARTMENT OFFICE 220 D H

MAJOR--TWENTY HOURS IN GEOGRAPHY IN ADDITION TO GEOGRAPHY 101. AT LEAST FIFTEEN OF THE TWENTY HOURS MUST BE IN COURSES CARRYING ADVANCED CREDIT. INDIVIDUAL PROGRAMS ARE ARRANGED FOR MAJOR STUDENTS WITH THE FOLLOWING SPECIAL INTERESTS--LIBERAL EDUCATION, BUSINESS, CARTOGRAPHY, GOVERNMENT, TEACHING, OR GRADUATE STUDY. THESE PROGRAMS INCLUDE DEPARTMENTAL COURSES, MINOR FIELDS, AND RECOMMENDED ELECTIVES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS IN DEPARTMENTS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED IN CONSULTATION WITH THE DEPARTMENTAL ADVISER AND WITH THE APPROVAL OF THE DEAN OF THE COLLEGE. AT LEAST EIGHT HOURS OF THE TWENTY MINOR HOURS MUST BE TAKEN IN EACH IF THE STUDENT ELECTS TO MINOR IN TWO DIFFERENT DEPARTMENTS.

DEPARTMENTAL DISTINCTION--STUDENTS ELIGIBLE FOR GRADUATION WITH HONORS IN LIBERAL ARTS AND SCIENCES SHOULD CONSULT WITH THE DEPARTMENTAL ADVISER CONCERNING GRADUATION WITH DISTINCTION IN GEOGRAPHY.

COURSES FOR UNDERGRADUATES

GEOG 101 ELEMENTS OF GEOGRAPHY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

05809	LECT	B	9	MTUWTH	323	D H	FELLMANN
	QUIZ	B	3-5	TUWTH	323	D H	

GEOG 104 WORLD REGIONAL GEOGRAPHY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

05817	LECT	A	8-10	MTUWTH	113	D H	GARLAND

GEOG 105 INTRODUCTORY ECONOMIC GEOGRAPHY.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

05825	LECT	C	10-12	MTUWTH	323	D H	ROEPKE

GEOG 185 INTRODUCATION TO SOCIAL STATISTICS.
SAME AS SOC. 185.
PREREQUISITE--SOC. 100, OR CONSENT OF INSTRUCTOR, OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS

05833	LECT-DISC	C	10-12	M W F	111	G H	DEVRIES

COURSES FOR ADVANCED UNDERGRADUATES

```
GEOG  272     INTRODUCTORY FIELD GEOGRAPHY.
         PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
         5 TO 8 HOURS DEPENDING ON DURATION OF CAMP.
       05841      LAB                ARR
              FIELD CAMP      METROPOLIS, ILLINOIS     ARMSTRONG
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
GEOG  353     GEOGRAPHY OF THE U S S R.
         PREREQUISITE--EIGHT HOURS OF GEOGRAPHY OR CONSENT OF INSTRUCTOR,
         OR ENROLLMENT AS A MAJOR OR MINOR IN RUSSIAN LANGUAGE AND
         AREA STUDIES.
         3 HOURS, OR 3/4 UNIT
       05850      LECT-DISC  D       11        MTUWTH     113  D H          FELLMANN
                             D       11-1            F    323  D H          FELLMANN

GEOG  371     INTRODUCTION TO RESEARCH, I.
         PREREQUISITE--GEOGRAPHY MAJOR OR SENIOR STANDING WITH A MINIMUM
         OF 12 HOURS OF GEOGRAPHY.
         3 HOURS, OR 3/4 UNIT
       05868      LECT-DISC          ARR                                     BOOTH
```

COURSES FOR GRADUATES

```
GEOG  478     ADVANCED FIELD GEOGRAPHY.
         PREREQUISITE--GRADUATE STANDING IN GEOGRAPHY.
         1 1/4 TO 2 UNITS
       05876      LAB        1       ARR
       05884      LAB        2       ARR
              FIELD CAMP      METROPOLIS, ILLINOIS     ARMSTRONG
              FIELD CAMP      MEXICO                   ALEXANDER & THOMPSON

GEOG  495     ADVANCED STUDIES IN GEOGRAPHY.
         1/2 TO 2 UNITS
              *PROBLEMS OF GEOGRAPHIC STUDY                    B  ARMSTRONG
                                                               C  BOOTH
                                                               F  GARLAND
                                                               G  ROEPKE
       05892      CONF      *B      ARR                                     ARMSTRONG
       05905      CONF      *C      ARR                                     BOOTH
       05913      CONF      *F      ARR                                     GARLAND
       05921      CONF      *G      ARR                                     ROEPKE

GEOG  499     THESIS RESEARCH.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
       05930      CONF               ARR                                     STAFF
```

GEOLOGY

DEPARTMENT OFFICE 234 N H

MAJOR--TWENTY HOURS IN GEOLOGY, EXCLUDING GEOL. 101, PHYSICAL GEOLOGY, 105, AGRICULTURAL GEOLOGY, AND 150, GEOLOGY FOR ENGINEERS. THE FOLLOWING COURSES, IN ADDITION TO GEOL. 101, PHYSICAL GEOLOGY, ARE FUNDAMENTAL FOR A MAJOR IN GEOLOGY--102, HISTORICAL GEOLOGY, 131 AND 132, MINERALOGY, 301, GEOMORPHOLOGY, 311, STRUCTURAL GEOLOGY 320, PALEONTOLOGY, 321, STRATIGRAPHY, 317, FIELD GEOLOGY IN THE ROCKY MOUNTAINS, G E 205, APPLIED DESCRIPTIVE GEOMETRY IN GEOLOGICAL PROBLEMS, CHEM. 101 OR 102, GENERAL CHEMISTRY, PHYSICS 101, GENERAL PHYSICS, MATH. 112, COLLEGE ALGEBRA, MATH. 114, TRIGONOMETRY, AND MATH. 123 OR 122, ANALYTIC GEOMETRY.

STUDENTS ARE ADVISED TO TAKE MATH. 132 AND 142, OR MATH. 133 AND 143, CALCULUS, AND PHYCS. 102-GENERAL PHYSICS.

STUDENTS WHOSE PRIMARY INTEREST IS MINERALOGY, PETROLOGY, AND MINERAL DEPOSITS SHOULD ALSO TAKE CHEM. 105, INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS, AND CHEM. 245 AND 246, PHYSICAL CHEMISTRY FOR ENGINEERS, OR THE EQUIVALENT. IT IS ALSO ADVISABLE FOR SUCH STUDENTS TO TAKE GEOL. 335-OPTICAL MINERALOGY, AND GEOL. 336-PETROGRAPHY, DURING THE SENIOR YEAR.

MINORS--TWENTY HOURS CHOSEN FROM ONE OR TWO OF THE FOLLOWING SUBJECTS--ASTRONOMY, BOTANY, CHEMISTRY, CIVIL ENGINEERING, ECONOMICS, GEOGRAPHY, MATHEMATICS, MINING ENGINEERING, PHYSICS, AND ZOOLOGY, AFTER CONSULTATION WITH THE DEPARTMENT OF GEOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

DEPARTMENTAL DISTINCTION--ONLY THOSE STUDENTS WHO HAVE CREDIT IN GEOL. 290 AND WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. EACH STUDENT WHO DESIRES TO REGISTER MUST OBTAIN A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK AND PRESENT IT TO THE HEAD OF THE DEPARTMENT AT THE TIME OF REGISTRATION.

NOTE--CERTAIN GEOLOGY COURSES ARE OFFERED ONLY IN ALTERNATE YEARS--324, VERTEBRATE PALEONTOLOGY, 401, ADVANCED DYNAMIC GEOLOGY, 402, ADVANCED HISTORICAL GEOLOGY.

AT LEAST ONE YEAR OF GRADUATE WORK IS NECESSARY AS FURTHER TRAINING FOR ALL PROFESSIONAL WORK IN GEOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

GEOL 290 INTRODUCTION TO RESEARCH.
CREDIT TO BE ARRANGED.
05948 CONF &A ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOL 317 FIELD GEOLOGY IN THE ROCKY MOUNTAINS.
PREREQUISITE--GEOL. 102 AND CONSENT OF INSTRUCTOR.
FIELD TRIP, APPROXIMATE COST $325 TO $470.
8 HOURS, OR 2 UNITS
05956 LAB-DISC ARR JOHNSON AND OTHERS

COURSES FOR GRADUATES

GEOL 493 ADVANCED STUDIES IN GEOLOGY.
1/2 TO 2 UNITS
A--CLAY MINERALOGY
B--ENGINEERING GEOLOGY
C--GEOMORPHOLOGY AND GLACIAL GEOLOGY
D--GEOTECTONICS
E--GROUND-WATER GEOLOGY
F--MICROPALEONTOLOGY
G--MINERAL DEPOSITS
H--MINERALOGY AND CRYSTALLOGRAPHY
I--PALEOBOTANY--SEE BOT. 493
J--PALEONTOLOGY
K--PENNSYLVANIAN STRATIGRAPHY
L--PETROGRAPHY AND PETROLOGY
M--SEDIMENTARY PETROLOGY
N--STRATIGRAPHY
O--OCEANOGRAPHY AND OCEAN ENGINEERING
P--SUBMARINE GEOLOGY

05964	CONF	A	ARR	GRIM, WAHL
05972	CONF	B	ARR	DEERE,RICHARDS
05981	CONF	C	ARR	SHAFFER, WHITE
05999	CONF	D	ARR	CAROZZI
06003	CONF	E	ARR	FARVOLDEN
06011	CONF	F	ARR	SCOTT
06020	CONF	G	ARR	HAGNER
06038	CONF	H	ARR	HENDERSON
06046	CONF	I	ARR	STEWART
06054	CONF	J	ARR	HAY, SCOTT
06062	CONF	K	ARR	WANLESS
06071	CONF	L	ARR	CHAPMAN
06089	CONF	M	ARR	CAROZZI, RICHARDS, WANLESS
06097	CONF	N	ARR	LANGENHEIM SCOTT MANN
06118	CONF	O	ARR	RICHARDS
06126	CONF	P	ARR	RICHARDS

GEOL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

06134	CONF		ARR	STAFF

GERMANIC LANGUAGES AND LITERATURES

DEPARTMENT OFFICE 371 L H

MAJOR--TWENTY HOURS IN GERMAN, EXCLUDING GERMAN 101, 102, 103, 104 AND 113, AND INCLUDING AT LEAST SIX HOURS IN COURSES IN THE 300 GROUP--NORMALLY 301 AND 302--OR EQUIVALENT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO SUBJECTS CHOSEN FROM THE FOLLOWING LIST, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT--EDUCATION, ENGLISH--EXCLUDING RHET. 101, 102, AND 200--FRENCH, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, LINGUISTICS--EXCLUDING LING. 301--MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN AND SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, RUSS. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT LANGUAGE.

COURSES FOR UNDERGRADUATES

GER 101 ELEMENTARY COURSE, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR GER. 101 WITHOUT GER. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR FOUR HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY--TIME TO BE ARRANGED.

06142	LECT-DISC	A	8-10	MTUWTH	216	L H

GER 102 ELEMENTARY COURSE, II.
PREREQUISITE--GER. 101 OR ONE YEAR OF HIGH SCHOOL GERMAN.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR FOUR HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY--TIME TO BE ARRANGED.

06151	LECT-DISC	A	8-10	MTUWTH	4	G	H	
06169	LECT-DISC	C	10-12	MTUWTH	9	G	H	

GER 103 INTERMEDIATE COURSE, I.
PREREQUISITE--GER. 102, TWO YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
STUDENTS MUST REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

06177	LECT-DISC	A	8-10	MTUWTH	186	L	H	PHILIPPSON

GER 104 INTERMEDIATE COURSE, II.
PREREQUISITE--GER. 103, OR THREE YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS

06185	LECT-DISC	A	8-10	MTUWTH	9	G	H	STEGEMEIER
06193	LECT-DISC	C	10-12	MTUWTH	1	G	H	FREY

COURSES FOR ADVANCED UNDERGRADUATES

GER 210 MASTERPIECES OF GERMAN LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GERMAN OR EQUIVALENT.
3 HOURS

06206	LECT-DISC	A	8-10	M W F	261	L	H	HAILE

GER 211 CONVERSATION AND WRITING, I.
PREREQUISITE--GER. 103 AND 113, OR GER. 104, OR EQUIVALENT.
3 HOURS

06214	LECT-DISC	C	10-12	M W F	216	L	H	

GER 260 LYRICS AND BALLADS.
PREREQUISITE--GER. 210 OR EQUIVALENT.
3 HOURS

06222	LECT-DISC	C	10-12	M W F	261	L	H	STEGEMEIER

GER 291 SENIOR THESIS AND HONORS COURSE, I.
PREREQUISITE--SENIOR STANDING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

06231	LECT-DISC		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GER 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

06249	LECT-DISC		10	MTUWTH	232	L	H	MYERS

COURSES FOR GRADUATES

GER 400 BEGINNING GERMAN FOR GRADUATE STUDENTS.
4 HOURS--NO GRADUATE CREDIT.

06257	LECT-DISC	A1	8-10	MTUWTH	370	L	H	
06265	LECT-DISC	A2	8-10	MTUWTH	388	L	H	
06273	LECT-DISC	C1	10-12	MTUWTH	370	L	H	
06281	LECT-DISC	C2	10-12	MTUWTH	388	L	H	
06290	LECT-DISC	K	7-9PM	MTUWTH	3	G	H	

GER 401 READINGS IN GERMAN FOR GRADUATE STUDENTS.
PREREQUISITE--GER. 400 OR EQUIVALENT.
4 HOURS--NO GRADUATE CREDIT.
*SECTIONS A2, C2, AND K2 DO READINGS PARTICULARLY IN THE HUMANITIES AND THE SOCIAL SCIENCES, SECTIONS A1, C1, E, AND K1 IN THE NATURAL SCIENCES.

06337	LECT-DISC	*A1	8-10	M	W	F	1	G	H
06302	LECT-DISC	*A2	8-10	M	W	F	3	G	H
06345	LECT-DISC	*C1	10-12	M	W	F	3	G	H
06311	LECT-DISC	*C2	10-12	M	W	F	4	G	H
06353	LECT-DISC	*E	1-3	M	WTH		4	G	H
06361	LECT-DISC	*K1	7-9PM	M	WTH		4	G	H
06329	LECT-DISC	*K2	7-9PM	M	WTH		9	G	H

GER 452 GERMAN LITERATURE FROM THE TWENTIES TO THE PRESENT.
PREREQUISITE--GER. 301 AND 302 OR EQUIVALENT.
1 UNIT

06370	LECT-DISC	A	8-10	M	W	F	375	L	H	FREY

GER 460 SEMINAR IN GERMAN LITERATURE.
1 UNIT

06388	LECT-DISC	ARR	PHILIPPSON

GER 493 RESEARCH IN SPECIAL TOPICS.
1 TO 4 UNITS

06396	LECT-DISC	ARR	HAILE

GER 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS

06409	CONF	ARR	STAFF

GREEK

DEPARTMENT OFFICE 360 L H

MAJOR--TWENTY HOURS. IN ADDITION CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, LATIN BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

CREDIT FOR NEW TESTAMENT GREEK TRANSFERRED FROM OTHER INSTITUTIONS IS NOT COUNTED TOWARD A MAJOR OR MINOR UNTIL AFTER THE SATISFACTORY COMPLETION OF GREEK 201-202 AND THEN ONLY TO A POSSIBLE MAXIMUM OF EIGHT HOURS AS THE EQUIVALENT OF GREEK 101-102 AND THREE HOURS AS THE EQUIVALENT OF ONE SEMESTER OF GREEK 391.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GRK 391 READINGS IN GREEK LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GREEK, CONSENT OF INSTRUCTOR.
*MAY BE REPEATED FOR MAXIMUM OF 12 HOURS CREDIT.
*3 HOURS, OR 3/4 UNIT

06417	LECT-DISC	A	11	MTUWTHFS	394	L	H	NADUMIDES

COURSES FOR GRADUATES

UNLESS OTHERWISE NOTED, THE PREREQUISITE TO ALL COURSES IS THREE YEARS OF COLLEGE GREEK.

GRK 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

06425	CONF	ARR	360	L	H	BATEMAN, STAFF

HEALTH EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR UNDERGRADUATES

```
H ED  150     HEALTH AND MODERN LIFE.
        PREREQUISITE--CREDIT OR REGISTRATION IN ZOOL. 104, OR CONSENT OF
        INSTRUCTOR.
        3 HOURS
        *ONE ADDITIONAL HOUR PER WEEK TO BE ARRANGED.
      06433      LECT-DISC  D      *11       MTUWTHF    211  H G            STONE
```

COURSES FOR ADVANCED UNDERGRADUATES

```
H ED  282     ORGANIZATION OF SCHOOL HEALTH PROGRAMS.
        3 HOURS
      06441      LECT-DISC  A        7-9     M          207  H G
                            A        8        TUWTHF    207  H G            STONE
```

COURSES FOR GRADUATES

```
H ED  401     PROBLEMS IN SCHOOL HEALTH EDUCATION.
        1 UNIT
      06450      LECT-DISC  B        9       MTUWTH     207A H G            HUFFMAN

H ED  490     SEMINAR.
        NO CREDIT
      06468      LECT-DISC        ARR                                       HUFFMAN

H ED  499     THESIS RESEARCH.
        1/2 TO 2 UNITS
      06476      CONF             ARR                                       HUFFMAN,
                                                                            FLORID
```

HEALTH SCIENCE

DEPARTMENT OFFICE HEALTH CENTER

COURSES FOR ADVANCED UNDERGRADUATES

```
HL SC 200     MENTAL HEALTH.
        2 HOURS
      06484      LECT-DISC  A       11       MTUWTH     393  BEV HALL       LITTLE

HL SC 206     SEX EDUCATION AND FAMILY LIFE.
        PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
        2 HOURS
        INSTRUCTORS TEACHING HL. SC. 206 ARE AKERS, CAVINS,
        MILLER, NICHOLS, RASMUSSEN, AND TEIGLER.
      06492      LECT-DISC  A        9       MTUWTH     393  BEV HALL       TEIGLER
```

HISTORY

DEPARTMENT OFFICE 359 ARMORY

MAJOR--TWENTY-FOUR HOURS IN HISTORY, ALL IN COURSES HAVING JUNIOR STANDING AS A PREREQUISITE-ONE FRESHMAN-SOPHOMORE SURVEY COURSE SEQUENCE-HISTORY 111-112, 131-132, 151-152, 181-182, DGS 121-122--OR ITS EQUIVALENT, MUST BE TAKEN AS A PREREQUISITE TO THE MAJOR. THE COURSES OFFERED MUST INCLUDE AT LEAST TWELVE HOURS IN AN AREA OF SPECIALIZATION AND AT LEAST SIX HOURS IN A SECOND AREA. THE FOLLOWING AREAS MAY BE SELECTED--ANCIENT MEDIEVAL AND RENAISSANCE, EUROPE SINCE 1500, UNITED STATES AND LATIN AMERICA, ASIA. ALL MAJORS ARE REQUIRED TO TAKE EITHER HISTORY 297 OR 298-TO BE ELIGIBLE FOR THESE COURSES, EACH MAJOR MUST HAVE HAD AT LEAST FOURTEEN HOURS IN HISTORY, SIX OF WHICH MUST BE IN COURSES ON THE ADVANCED LEVEL.

MINORS--TWENTY HOURS, NOT INCLUDING MORE THAN FOUR HOURS OPEN TO FRESHMEN, IN ONE OR TWO OF THE FOLLOWING--ANCIENT OR MODERN LANGUAGE EXCLUDING ELEMENTARY COURSES 101 AND 102, ANTHROPOLOGY, ECONOMICS, ENGLISH AND AMERICAN LITERATURE, GEOGRAPHY, LAW, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN AMERICAN STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, ASIAN STUDIES OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR, EXCLUDING THE COURSES IN HISTORY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 121 AND 122, HISTORY OF CIVILIZATION, ARE ACCEPTED AS SATISFYING THE PREREQUISITE OF A YEAR OF COLLEGE HISTORY IN ALL CASES IN WHICH IT IS REQUIRED.

HIST 111 HISTORY OF WESTERN CIVILIZATION TO 1815.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

06505	LECT		9	MTUWTH	329	ARMORY	HILL
06513	DISC	A	11	MTUWTH	329	ARMORY	
06521	DISC	B	1	MTUWTH	329	ARMORY	

HIST 152 HISTORY OF THE UNITED STATES FROM 1865 TO THE PRESENT.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 152 AND 262.
*4 HOURS

06530	LECT		8	MTUWTH	106	L H	FLADELAND
06548	DISC	A	10	MTUWTH	329	ARMORY	
06556	DISC	B	10	MTUWTH	106	L H	
06564	DISC	C	11	MTUWTH	333	ARMORY	
06572	DISC	D	11	MTUWTH	106	L H	

COURSES FOR ADVANCED UNDERGRADUATES

HIST 220 MODERN RUSSIA AND ITS PROBLEMS FROM 1855 TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY, OR CONSENT OF INSTRUCTOR.
3 HOURS

06581	LECT		9	MTUWTHFS	106	L H	UROFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ONE YEAR OF COLLEGE HISTORY IS REQUIRED EXCEPT WHERE NOTED.

HIST 304 MEDIEVAL CIVILIZATION.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE.
3 HOURS, OR 1/2 OR 1 UNIT

06599	LECT		10	MTUWTHFS	333	ARMORY	GEANAKOPLOS

HIST 306 THE AGE OF THE PROTESTANT AND CATHOLIC REFORMATION, 1500 TO 1648.
3 HOURS, OR 1/2 OR 1 UNIT

06601	LECT		9	MTUWTHF	328	ARMORY	LEE
	DISC		3	W	328	ARMORY	LEE

HIST 308 THE EUROPEANIZATION OF THE NEAR EAST, 1768 TO 1914.
3 HOURS, OR 1/2 OR 1 UNIT

06610	LECT	8	MTUWTHFS	333	ARMORY	DAWN

HIST 319 MODERN EUROPEAN DIPLOMATIC HISTORY, 1890 TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

06628	LECT	8	MTUWTHFS	328	ARMORY	SCHROEDER

HIST 320 RUSSIA FROM THE EARLIEST TIMES TO PETER THE GREAT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

06636	LECT	10	MTUWTHFS	328	ARMORY	UROFF

HIST 346 CONSTITUTIONAL HISTORY OF ENGLAND, 1485 TO THE PRESENT.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR POLITICAL SCIENCE.
3 HOURS, OR 1/2 OR 1 UNIT

06644	LECT	11	MTUWTHFS	328	ARMORY	HILL

HIST 356 HISTORY OF THE UNITED STATES FROM JACKSON TO THE CIVIL WAR.
3 HOURS, OR 1/2 OR 1 UNIT

06652	LECT	11	MTUWTHFS	332	ARMORY	FLADELAND

ECONOMIC HISTORY OF THE UNITED STATES, SINCE 1860.
3 HOURS, OR 1/2 OR 1 UNIT

06661	LECT	9	MTUWTHFS	333	ARMORY	SPENCE

COURSES FOR GRADUATES

HIST 415 SEMINAR IN MEDIEVAL HISTORY.
1 UNIT

06679	DISC	3-5	TU TH	424B	LIB	GEANAKOPLOS

HIST 421 SEMINAR IN EUROPEAN HISTORY SINCE 1815.
1 UNIT

06687	DISC	1-3	M W	303	ARMORY	SCHROEDER

HIST 423 SEMINAR IN ENGLISH HISTORY TO 1688.
1 UNIT

06695	DISC	1-3	TU TH	303	ARMORY	LEE

HIST 441 SEMINAR IN NEAR AND MIDDLE EASTERN HISTORY.
1 UNIT

06708	DISC	3-5	TU TH	303	ARMORY	DAWN

HIST 453 SEMINAR IN AMERICAN HISTORY SINCE 1789.
1 UNIT

06716	DISC	3-5	M W	303	ARMORY	SPENCE

HIST 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

06724	CONF	ARR				STAFF

HISTORY AND PHILOSOPHY OF EDUCATION

DEPARTMENT OFFICE 369 EDUC

COURSES FOR ADVANCED UNDERGRADUATES

HP ED 201 FOUNDATIONS OF AMERICAN EDUCATION.
PREREQUISITE--EL. ED. 101 OR SE. ED. 101 OR VOTEC. 101, PSYCH. 100.
2 HOURS

06732	LECT-DISC	A	8	TUWTHF	143	ARMORY	
06741	LECT-DISC	B	9	TUWTHF	143	ARMORY	
06759	LECT-DISC	C	10	TUWTHF	143	ARMORY	
06767	LECT-DISC	D	11	TUWTHF	143	ARMORY	

HP ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

06775	CONF		ARR				STAFF

HP ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

06783	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

HP ED 301 PHILOSOPHY OF EDUCATION.
2 HOURS, OR 1/2 UNIT

06791	LECT-DISC		8	TUWTHF	223	G H	MCMURRAY

HP ED 302 HISTORY OF AMERICAN EDUCATION.
2 HOURS, OR 1/2 UNIT

06804	LECT-DISC		10	TUWTHF	1	EDUC	MEYER

HP ED 303 COMPARATIVE EDUCATION.
2 HOURS, OR 1/2 UNIT

06812	LECT-DISC		11	TUWTHF	162	EDUC	KAULFERS

HP ED 304 SOCIAL FOUNDATIONS OF EDUCATION.
2 HOURS, OR 1/2 UNIT

06821	LECT-DISC	A1	8	TUWTHF	1	EDUC	SMITH
06839	LECT-DISC	A2	8	TUWTHF	146	ARMORY	MUNTYAN
06847	LECT-DISC	B1	9	TUWTHF	430	ARMORY	HUNT
06855	LECT-DISC	B2	9	TUWTHF	152	ARMORY	MUNTYAN
06863	LECT-DISC	B3	9	TUWTHF	241	ARMORY	KNIGHT
06871	LECT-DISC	C1	10	TUWTHF	2	EDUC	SMITH
06880	LECT-DISC	C2	10	TUWTHF	154	ARMORY	KNIGHT
06898	LECT-DISC	D1	11	TUWTHF	217	G H	KLASSEN
06901	LECT-DISC	D2	11	TUWTHF	172	ARMORY	HUNT
06919	LECT-DISC	F	2	TUWTHF	217	G H	KLASSEN

HP ED 305 HISTORY OF EDUCATIONAL IDEAS.
2 HOURS, OR 1/2 UNIT
*THIS SECTION LIMITED TO STUDENTS IN SPECIAL FOUR WEEK PROGRAMS ONLY.
ADMITTANCE ONLY BY SIGNATURE OF DEPARTMENT CHAIRMAN.

06927	LECT-DISC	A1	8	TUWTHF	432	ARMORY	WELLMAN
06935	LECT-DISC	A2	8	TUWTHF	221	G H	
06943	LECT-DISC	B1	9	TUWTHF	1	EDUC	KAULFERS
06951	LECT-DISC	B2	9	TUWTHF	146	ARMORY	PERKINSON
06960	LECT-DISC	C1	10	TUWTHF	173	ARMORY	
06978	LECT-DISC	C2	10	TUWTHF	430	ARMORY	WELLMAN
07017	LECT-DISC	*C3	10-12	TUWTHF	223	G H	WILLERS
06986	LECT-DISC	D1	11	TUWTHF	219	G H	HOLMES
06994	LECT-DISC	D2	11	TUWTHF	173	ARMORY	PERKINSON
07009	LECT-DISC	F	2	TUWTHF	1	EDUC	WILLERS

HP ED 401 MODERN THEORIES OF EDUCATION.
1 UNIT

07025	LECT-DISC		9	TUWTHF	11	COM W

HP ED 402 EDUCATIONAL MOVEMENTS IN THE TWENTIETH CENTURY.
PREREQUISITE--HP. ED. 300 OR 302 OR 403, OR CONSENT OF INSTRUCTOR.
1 UNIT

07033	LECT-DISC		11	TUWTHF	11	COM W	MEYER

HP ED 407 LOGICAL FOUNDATIONS OF METHODS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

07041	LECT-DISC		11	TUWTHF	389	EDUC	MCMURRAY

HP ED 410 SEMINAR IN THEORIES OF EDUCATIONAL AND SOCIAL CHANGE.
ONLY OPEN TO CANDIDATES FOR THE ED. D. OR PH. D. IN EDUCATION.
1 UNIT

07050	LECT-DISC	E	1-3	TU TH	389	EDUC	J R BURNETT, HOLMES
07068	LECT-DISC	F	2-4	W F	382	EDUC	BURNETT,PALM

HP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

07076	CONF		ARR	STAFF

HP ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS
*SECTION A TOPIC--HISTORY OF EDUCATION.
*SECTION B TOPIC--PHILOSOPHY OF EDUCATION.
*SECTION C TOPIC--COMPARATIVE EDUCATION.
*SECTION D TOPIC--SOCIAL FOUNDATIONS OF EDUCATION.

07084	CONF	*A	ARR	STAFF
07092	CONF	*B	ARR	STAFF
07105	CONF	*C	ARR	STAFF
07113	CONF	*D	ARR	STAFF

HP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

07121	CONF		ARR	STAFF

HP ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

07130	CONF		ARR	STAFF

HOME ECONOMICS

DEPARTMENT OFFICE 260 BEV HALL

NOTE--HOME ECONOMICS COURSES DESIGNED PARTICULARLY FOR NON-MAJOR STUDENTS AND NOT FULFILLING THE REQUIREMENTS FOR A MAJOR IN HOME ECONOMICS ARE HOME ECON. 120, 125, 193, 196, AND 271.

OTHER HOME ECONOMICS COURSES ARE ALSO OPEN TO NON-MAJORS WHO HAVE THE PREREQUISITES LISTED FOR THE COURSE AND THE CONSENT OF THE INSTRUCTOR. STUDENTS ARE REFERRED PARTICULARLY TO H.EC. 105, 132, 133, 160, 171, 182, 183, 184, 202, 210, 260, 263, 270, 285, 286.

COURSES FOR UNDERGRADUATES

H EC 160 THE HOME AND ITS FURNISHINGS.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN H. EC. 253.
*4 HOURS

07148	LECT	1	MTUWTH	242	BEV HALL	FISHER
	LAB	2-4	MTUWTH	234	BEV HALL	FISHER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

H EC 330 EXPERIMENTAL FOODS.
PREREQUISITE--H. EC. 231, MCBIO. 100, 101.
*FOR 1 UNIT TWO ADDITONAL HOURS WILL BE SCHEDULED.
*3 HOURS, OR 1/2 OR 1 UNIT

07156	LECT	1	TU TH	328	BEV HALL	JANSSEN
	LAB	2-5	TU TH	362	BEV HALL	JANSSEN
		1-4	M W	362	BEV HALL	JANSSEN

H EC 351 SPECIAL PROBLEMS IN GROUP FEEDING.
PREREQUISITE--H. EC. 220, 231, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR H. EC. 351 IN ADDITION TO H. EC. 240, 345, OR 350.
*3 HOURS, OR 1/2 UNIT
FIRST FOUR WEEKS.

07164	LAB-DISC	8-1230	MTUWTHF	292	BEV HALL	BONNELL

H EC 361 DEVELOPMENT AND FUNCTION OF FAMILY HOUSING.
SAME AS AG. E. 361.
PREREQUISITE--H. EC. 160 AND 171 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
SECOND FOUR WEEKS.

07172	LECT-DISC	8-11	M W F	218	AGR ENG	HANSEN
	LAB	8-11	TU TH	209	AGR ENG	HANSEN

H EC 380 ADVANCED TEXTILES.
PREREQUISITE--CHEM. 132, H. EC. 183.
4 HOURS, OR 1 UNIT

07181	LECT	10	TUWTHF	208	BEV HALL	GALBRAITH
	LAB	8-10	TUWTHF	201	BEV HALL	GALBRAITH RICHARDSON

H EC 388 PROBLEMS IN TEXTILES AND CLOTHING.
PREREQUISITE--H. EC. 286 OR 380, OR MKTG. 211, MINIMUM GRADE POINT AVERAGE OF 3.5, SENIOR STANDING IN HOME ECONOMICS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

07199	CONF	ARR				GALBRAITH

COURSES FOR GRADUATES

H EC 410 PROBLEMS IN FAMILY LIVING.
PREREQUISITE--H. EC. 210.
1 UNIT

07201	DISC	10-12	TUWTHF	449	BEV HALL

H EC 493 ADVANCED STUDIES IN HOME ECONOMICS.
1/2 OR 1 UNIT
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
* A--THE CHILD AND THE FAMILY
* B--FAMILY AND CONSUMPTION ECONOMICS
* C--FOODS
* D--NUTRITION
* E--TEXTILES AND CLOTHING

07210	CONF	*A	ARR
07228	CONF	*B	ARR
07236	CONF	*C	ARR
07244	CONF	*D	ARR
07252	CONF	*E	ARR

H EC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

*	A--THE CHILD AND THE FAMILY			MILLS
*	B--FAMILY AND CONSUMPTION ECONOMICS			DUNSING
*	C--FOODS			VAN DUYNE
*	D--NUTRITION			SMITH
*	E--TEXTILES AND CLOTHING			GALBRAITH
07261	CONF	*A	ARR	
07279	CONF	*B	ARR	
07287	CONF	*C	ARR	
07295	CONF	*D	ARR	
07308	CONF	*E	ARR	

HORTICULTURE

DEPARTMENT OFFICE 124 M H

COURSES FOR ADVANCED UNDERGRADUATES

HORT 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5. NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR A THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

	A--POMOLOGY	LOTT, SIMONS, TITUS, ZYCH	
	B--VEGETABLE CROPS	ARNOLD, MCCOLLUM, THOMPSON VANDEMARK	
	C--FLORICULTURE	BEEVERS, BUTLER, CULBERT, FOSLER GARTNER, HODGES NELSON	
	D--FRUIT BREEDING	BIRKELAND, DAYTON	
	E--APICULTURE	JAYCOX	
07316	CONF	ARR	STAFF

COURSES FOR GRADUATES

HORT 492 SPECIAL TOPICS IN HORTICULTURE.
PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
1/2 TO 2 UNITS

07324	CONF	ARR	STAFF

HORT 499 THESIS RESEARCH.
REQUIRED FOR MAJOR IN HORTICULTURE. PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

	A--FLORICULTURE	BEEVERS, CULBERT, GARTNER, HODGES	
	B--FRUIT BREEDING	BARRETT, BIRKELAND, DAYTON	
	C--POMOLOGY	JAYCOX, LOTT, SIMONS, TITUS	
	D--VEGETABLE CROPS	ARNOLD, MCCOLLUM, RHODES, THOMPSON, VANDEMARK	
07332	CONF	ARR	STAFF

INDUSTRIAL ADMINISTRATION

DEPARTMENT OFFICE 350 COM W

COURSES FOR UNDERGRADUATES

I ADM 101 INDUSTRIAL ORGANIZATION AND MANAGEMENT.
PREREQUISITE--ECON. 102 OR CONSENT OF INSTRUCTOR, FORTY-FIVE CREDIT HOURS.
*CREDIT IS NOT GIVEN IN BOTH I. ADM. 101 AND I. E. 237.
*3 HOURS

07341	LECT-DISC	C	10	MTUWTHF	307	D K H
		C	3	M	307	D K H

COURSES FOR ADVANCED UNDERGRADUATES

I ADM 200 THE LEGAL ENVIRONMENT OF BUSINESS.
PREREQUISITE--JUNIOR STANDING, ACCY. 105, ECON 102.
*CREDIT IS NOT GIVEN FOR I. ADM. 200 IN ADDITION TO I. ADM. 261.
3 HOURS

07359	LECT-DISC	A	8	MTUWTHF	307	D K H
		A	3	W	307	D K H.

I ADM 201 PRODUCTION MANAGEMENT.
PREREQUISITE--I. ADM. 101, ECON. 170.
FIELD TRIP.
3 HOURS

07367	LECT-DISC	D	11	MTUWTHF	36	COM W
		D	3	TH	36	COM W

I ADM 210 PRODUCTION MANAGEMENT AND ORGANIZATION.
PREREQUISITE--JUNIOR STANDING, ECON. 172 OR EQUIVALENT.
4 HOURS

07375	LECT-DISC	E	1-240	MTUWTH	36	COM W

I ADM 248 PERSONNEL ADMINISTRATION.
PREREQUISITE--ECON. 102 OR 108.
3 HOURS

07383	LECT-DISC	B	9	MTUWTHF	160	COM W
		B	2	F	160	COM W

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

I ADM 301 THE LAW OF SECURITY TRANSACTIONS AND BANKING.
PREREQUISITE--B. LAW 100 OR I. ADM. 200, SENIOR STANDING.
3 HOURS, OR 3/4 OR 1 UNIT

07391	LECT-DISC	C	10	MTUWTHF	108	D K H
		C	3	M	108	D K H

I ADM 311 ADMINISTRATIVE POLICIES AND ORGANIZATION.
PREREQUISITE--I. ADM. 101, MKTG. 101, SENIOR STANDING.
3 HOURS, OR 1/2 OR 3/4 UNIT

07404	LECT-DISC	B	9	MTUWTHF	108	D K H
		B	2	M	108	D K H

I ADM 312 HUMAN RELATIONS IN BUSINESS.
SAME AS L.I.R. 312.
PREREQUISITE--I. ADM. 101 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 3/4 UNIT

07412	LECT-DISC	D	11	MTUWTHF	160	COM W
		D	3	TU	160	COM W

COURSES FOR GRADUATES

I ADM 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS L.I.R. 448.
PREREQUISITE--I. ADM. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT
07421 LECT-DISC E 1-3 M TH 245 COM W

I ADM 499 THESIS RESEARCH.
1 UNIT
07439 CONF E 1-3 W 245 COM W STAFF

INDUSTRIAL ENGINEERING

DEPARTMENT OFFICE 144 M E B

COURSES FOR GRADUATES

I E 458 LABORATORY INVESTIGATIONS IN INDUSTRIAL ENGINEERING.
1/2 TO 1 1/2 UNITS
07447 CONF ARR STAFF

ITALIAN

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN ITALIAN, EXCLUDING ITALIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. LINGUISTICS 300 AND ITALIAN 291 AND 292 ARE ACCEPTABLE. ITALIAN 291 AND 292 FOR MAJORS CAN BE ARRANGED FOR ADVANCED GROUP CREDIT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--EDUCATION, ENGLISH, EXCLUDING RHET. 101 AND 102, FRENCH, GERMAN, GREEK, HISTORY, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR GRADUATES

ITAL 491 SPECIAL TOPICS IN ITALIAN.
1/2 OR 1 UNIT
07455 CONF ARR STAFF

ITAL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
07463 CONF ARR KAHANE

JOURNALISM

DEPARTMENT OFFICE 120 A G H

COURSES FOR ADVANCED UNDERGRADUATES

JOURN 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS

07471	CONF	ARR		120A G H	JENSEN

COURSES FOR GRADUATES

JOURN 468 THE POLITICAL ECONOMY OF COMMUNICATIONS.
SAME AS COMM. 468.
1 UNIT

07480	LECT-DISC	10-12	TU TH	123 G H	GUBACK

JOURN 490 SPECIAL TOPICS IN JOURNALISM.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 OR 1 UNIT

07498	CONF	ARR		120A G H	JENSEN

JOURN 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN JOURNALISM.
1 TO 2 UNITS

07501	CONF	ARR		120A G H	JENSEN

LABOR AND INDUSTRIAL RELATIONS

DEPARTMENT OFFICE 504 E ARMORY, C.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

L I R 312 HUMAN RELATIONS IN BUSINESS.
SAME AS I. ADM. 312.
PREREQUISITE--I. ADM. 101 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 3/4 UNIT

07519	LECT-DISC	D	11	MTUWTHF	160	COM W
		D	3	TU	160	COM W

COURSES FOR GRADUATES

L I R 441 LABOR ECONOMICS.
SAME AS ECON. 441.
PREREQUISITE--A MINIMUM OF SIX HOURS OF ECONOMICS.
1 UNIT

07527	LECT-DISC	E	1-3	TU TH	94	COM W	PARRISH

L I R 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS I. ADM. 448.
PREREQUISITE--I. ADM. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

07535	LECT-DISC	E	1-3	M TH	245	COM W

L I R 490 INDIVIDUAL TOPICS.
0 TO 2 UNITS

07543	CONF	ARR	STAFF

L I R 499 THESIS RESEARCH.
1/2 TO 2 UNITS

07551	CONF	ARR	STAFF

LANDSCAPE ARCHITECTURE

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

L A 436 ADVANCED LANDSCAPE DESIGN.
PREREQUISITE--BACHELORS DEGREE IN LANDSCAPE ARCHITECTURE.
1 TO 2 UNITS
07560 LAB ARR 1203 W CALIF STAFF

L A 499 THESIS RESEARCH.
1/2 TO 2 UNITS
07578 CONF ARR STAFF

LATIN

DEPARTMENT OFFICE 360 L H

MAJOR--TWENTY HOURS, EXCLUDING LATIN 101, 102, AND 103, AND INCLUDING SIX HOURS IN TRANSLATION COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES. IN ADDITION, CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE. SEE ALSO THE SPECIALIZED CURRICULUM PREPARATORY TO THE TEACHING OF LATIN.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, GREEK BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LAT 391 READINGS IN LATIN LITERATURE.
PREREQUISITE--THREE YEARS OF COLLEGE LATIN OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS.
*3 HOURS, OR 3/4 UNIT
07586 LECT-DISC 9 MTUWTHFS 362 L H HELLER

COURSES FOR GRADUATES

LAT 427 ROMAN SATIRE.
1 UNIT
07594 LECT-DISC 130-3 M W F 409 LIB BATEMAN

LAT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
07607 CONF ARR 360 L H HELLER

LATIN AMERICAN STUDIES PROGRAM

DEPARTMENT OFFICE ROOM 316 1207 W OREGON

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

STUDENTS MAY ELECT THE LATIN AMERICAN STUDIES PROGRAM AS EITHER A MAJOR OR A MINOR. IN BOTH CASES STUDENTS FOLLOW THE SAME PROGRAM. STUDENTS WHO ELECT LATIN AMERICAN STUDIES AS A MAJOR OR MINOR SHALL BE REQUIRED TO--

1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE SCIENCES AND LETTERS CURRICULUM.

2-COMPLETE SIX SEMESTERS OR EQUIVALENT OF COLLEGE SPANISH OR PORTUGUESE. IF A STUDENT WISHES TO TAKE BOTH SPANISH AND PORTUGUESE HE MAY TAKE TWO YEARS OF EACH TO SATISFY THIS REQUIREMENT IN THE CASE OF WELL-QUALIFIED STUDENTS THE LANGUAGE REQUIREMENT MAY BE MODIFIED.

3-COMPLETE AT LEAST TWENTY SEMESTER HOURS FROM THE COURSES LISTED BELOW, INCLUDING SOC. S. 101 AND/OR 102 AND SOC. S. 301, CHOSEN FROM AMONG FOUR DEPARTMENTS. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE LATIN AMERICAN STUDIES PROGRAM MAY NOT BE INCLUDED WITHIN THIS TWENTY HOURS.

ANTH. 271, 350, 352, 361, 380
ART 318

ECON. 352
GEOG. 231, 332
HIST. 375, 376, 377

PHIL. 319
POL. S. 342, 343.
PORT. 301, 303, 304, 305, 306
SOC. S. 101, 102, 301
SOC. 373
SPAN. 222, 307, 308, 332

MINORS--STUDENTS WHO MAJOR IN LATIN AMERICAN STUDIES MAY ELECT MINORS AS FOLLOWS--TWENTY HOURS, EXCLUDING COURSES TAKEN IN FRESHMAN YEAR, IN ANY ONE OF THE FOLLOWING SUBJECTS--AGRICULTURAL ECONOMICS, ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, HISTORY OF ART, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH, SOCIAL WORK, AND SOCIOLOGY. MAJORS IN LATIN AMERICAN STUDIES MAY NOT OFFER A SPLIT MINOR.

GRADUATE MINOR IN LATIN AMERICAN STUDIES

CANDIDATES FOR THE MASTERS DEGREE MUST ELECT A MINIMUM OF TWO UNITS FOR A MINOR IN THIS PROGRAM. DOCTORAL CANDIDATES WHO ELECT LATIN AMERICAN STUDIES AS A SOLE MINOR MUST EARN A MINIMUM OF FOUR UNITS OF CREDIT IN APPROVED COURSES, FOR A SPLIT MINOR, AT LEAST THREE UNITS OF CREDIT MUST BE EARNED. THE COURSES FOR ALL GRADUATE MINORS IN LATIN AMERICAN STUDIES MUST BE TAKEN IN AT LEAST TWO DEPARTMENTS. COURSES IN THE FOLLOWING LIST MAY BE INCLUDED IN THE GRADUATE MINOR.

AG. EC. 401
AGRON. 429
ANTH. 350, 352, 361, 380, 490
ART 318, 491
BOT. 300

ECON. 352, 411, 490

GEOG. 332, 495

HIST. 375, 376, 377, 476

PHIL. 319, 483
POL. S. 342, 343, 441, 442, 493
PORT. 301, 303, 304, 305, 306, 491
SOC. S. 301
SOC. 373, 490
SPAN. 307, 308, 431, 432, 433 434, 435, 436, 437, 438.

STUDENTS IN TECHNICAL AND PROFESSIONAL COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF LATIN AMERICAN AFFAIRS, CULTURE, AND LANGUAGES ARE INVITED TO CONSULT WITH MEMBERS OF THE TEACHING STAFF OF THE LATIN AMERICAN STUDIES PROGRAM, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH A PROGRAM MAY OFTEN BE ADOPTED AS A SPECIAL MINOR UNDER EXISTING REGULATIONS IF THE STUDENT SO DESIRES. IT IS RECOGNIZED THAT THE NUMBER OF ELECTIVE HOURS AVAILABLE FOR SUCH SPECIAL AREA STUDIES VARIES AMONG MANY OF THE EIGHT AND TEN PROGRAMS IN THE UNIVERSITY, BUT MOST STUDENTS WISHING TO INCREASE THEIR PROFICIENCY IN LATIN AMERICAN AFFAIRS CAN DO SO WITHOUT EXCESSIVE CROWDING OF SCHEDULES. THESE COURSES ARE OF PARTICULAR VALUE TO STUDENTS WHO INTEND TO CARRY ON TECHNICAL OR PROFESSIONAL WORK IN THE LATIN AMERICAN AREA FOR THE GOVERNMENT, PRIVATE BUSINESS, PUBLICATIONS, OR RELIGIOUS ORGANIZATIONS.

LAW

DEPARTMENT OFFICE 209 LAW

FIRST TERM--JUNE 13-JULY 20, 1966

SECOND TERM--JULY 21-AUGUST 27, 1966

COURSES FOR ADVANCED LAW STUDENTS

LAW 323 ADMINISTRATIVE LAW.
2 1/2 HOURS, OR 1 UNIT
GELLHORN & BYSE, CASES ON ADMINISTRATIVE LAW, 4TH ED
SECOND TERM.
07615 LECT-DISC A 1050-1205 MTUWTHF A LAW COHN

LAW 325 PLEADING.
2 1/2 HOURS, OR 1 UNIT
CLEARY, CASES ON PLEADING, 2ND ED.
FIRST TERM.
07623 LECT-DISC A 925-1040 MTUWTHF A LAW CLEARY

LAW 328 INCOME TAXATION.
2 1/2 HOURS, OR 1 UNIT
BITTKER, FEDERAL INCOME, ESTATE AND GIFT TAXATION, 3RD ED., AND COMMERCE CLEARING HOUSE, FEDERAL TAXATION--CURRENT LAW AND PRACTICE.
FIRST TERM.
STUDENTS TAKING THIS COURSE MUST TAKE LAW 352 IN SECOND TERM.
07631 LECT-DISC A 1050-1205 MTUWTHF A LAW MCCORD

LAW 335 TRIALS AND APPEALS.
2 1/2 HOURS, OR 1 UNIT
ROSENBURG & WEINSTEIN, ELEMENTS OF CIVIL PROCEDURE--AND EITHER -FEDERAL RULES OF CIVIL PROCEDURE, 1963 ED.-, OR -HART & WECHSLER, JUDICIAL CODE AND RULES OF PROCEDURE IN FEDERAL COURTS, STUDENTS ED., 1965 REV.
FIRST TERM.
07640 LECT-DISC A 240-355 MTUWTHF A LAW SEMMEL

LAW 338 INSURANCE.
2 1/2 HOURS, OR 1 UNIT
PATTERSON & YOUNG, CASES ON INSURANCE, 4TH ED.
SECOND TERM.
07658 LECT-DISC A 115-230 MTUWTHF A LAW DAVIS

LAW 344 CREDITORS RIGHTS.
2 1/2 HOURS, OR 1 UNIT
HANNA & MACLACHLAN, CASES ON CREDITORS RIGHTS, 5TH ED., AND HANNA & MACLACHLAN, BANKRUPTCY ACT OF 1898 AS AMENDED WITH ANNOTATIONS, 8TH ED.
SECOND TERM.
07666 LECT-DISC A 8-915 MTUWTHF A LAW BOWMAN

LAW 346 FUTURE INTERESTS.
2 1/2 HOURS, OR 1 UNIT
LEACH & LOGAN, FUTURE INTERESTS AND ESTATE PLANNING, 1961 ED.
FIRST TERM.
07674 LECT-DISC A 115-230 MTUWTHF A LAW SCOLES

LAW 352 TAXATION OF GRATUITOUS TRANSFERS.
2 1/2 HOURS, OR 1/2 UNIT
WARREN & SURREY, CASES ON FEDERAL ESTATE AND GIFT TAXATION
AND COMMERCE CLEARING HOUSE, FECERAL TAXATION - CURRENT LAW AND
PRACTICE, STUDENTS EDITION.
SECOND TERM.
STUDENTS TAKING THIS COURSE MUST TAKE LAW 328 IN FIRST TERM.
07682 LECT-DISC A 925-1040 MTUWTHF A LAW YOUNG

LAW 353 CORPORATION FINANCE AND SECURITIES.
2 1/2 HOURS, OR 1/2 UNIT
HERWITZ, BUSINESS PLANNING.
FIRST TERM.
07691 LECT-DISC A 925-1040 MTUWTHF E LAW FRAMPTON

LAW 355 TRADE REGULATION.
2 1/2 HOURS, OR 1 UNIT
HANDLER, CASES ON TRADE REGULATION, 3D ED.
SECOND TERM.
07703 LECT-DISC A 925-1040 MTUWTHF E LAW CARLSTON

LAW 358 SOCIAL LEGISLATION AND THE EMPLOYEE.
2 1/2 HOURS, OR 1 UNIT
CASEBOOK TO BE ANNOUNCED.
SECOND TERM.
07711 LECT-DISC A 240-355 MTUWTHF A LAW

LAW 369 SOVIET LAW.
2 1/2 HOURS, OR 1 UNIT
MATERIALS TO BE ANNOUNCED.
SECOND TERM.
07720 LECT-DISC A 1050-1205 MTUWTHF E LAW MAGGS

LAW 371 SEMINAR IN SELECTED LEGAL PROBLEMS.
2 1/2 HOURS, OR 1/2 UNIT
FIRST TERM.
07738 LECT-DISC A 8-915 MTUWTHF E LAW KRAUSE

LAW 399 RESEARCH ON SPECIAL TOPICS.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT
EITHER OR BOTH TERMS.
07746 CONF A ARR STAFF

COURSES FOR GRADUATES

LAW 499 THESIS RESEARCH.
1/2 TO 2 UNITS
EITHER OR BOTH TERMS.
07754 CONF A ARR STAFF

LIBRARY SCIENCE

DEPARTMENT OFFICE 331 LIB

COURSES FOR ADVANCED UNDERGRADUATES

LIB S 201 INTRODUCTION TO REFERENCE SERVICE.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

07762	LECT-DISC	A	8	MTU THF	66	LIB	BONE
		A	8-10	W	66	LIB	BONE
07771	LECT-DISC	B	10	MTUWTHF	66	LIB	BONE
		B	1	W	66	LIB	BONE

LIB S 204 DEVELOPMENT AND OPERATION OF LIBRARIES.
PREREQUISITE--JUNIOR STANDING.
3 HOURS OR 2 HOURS IN SUMMER.

07789	LECT-DISC	1	2	MTU THF	66	LIB	NASH
07797	LECT-DISC	2	11	MTU THF	66	LIB	NASH
07800	LAB	A	8-10	M	328	LIB	CONANT
07818	LAB	B	10-12	M	328	LIB	CONANT
07826	LAB	C	8-10	W	328	LIB	CONANT
07834	LAB	D	10-12	W	328	LIB	CONANT
07842	LAB	E	8-10	F	328	LIB	CONANT
07851	LAB	F	10-12	F	328	LIB	CONANT

LIB S 255 ORGANIZATION OF LIBRARY MATERIALS.
PREREQUISITE--SENIOR STANDING.
3 HOURS

07869	LECT-DISC	A	10	MTUWTHF	314	LIB	FOX
		A	11	M	227	LIB	FOX
07877	LECT-DISC	B	8	MTUWTHF	227	LIB	FOX
		B	11	W	227	LIB	FOX
07885	LECT-DISC	C	3	TUWTHF	227	LIB	HENDERSON
		C	3-5	M	227	LIB	HENDERSON

LIB S 258 SELECTION OF LIBRARY MATERIALS.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 2 HOURS IN SUMMER

07893	LECT-DISC	A	9	MTU THF	66	LIB	BOB
07906	LECT-DISC	B	1	MTU THF	66	LIB	STEVENS

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LIB S 302 LITERATURE AND THE SCIENCES.
PREREQUISITE--SENIOR STANDING, AND LIB. S. 204 AND 258, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

07914	LECT-DISC	8-10	M W F	314	LIB	JENKINS

LIB S 303 LIBRARY MATERIALS FOR CHILDREN.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

07922	LECT-DISC	9-11	M W F	227	LIB	WILKES

LIB S 304 LIBRARY MATERIALS FOR YOUNG ADULTS.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

07931	LECT-DISC	1-3	M W F	227	LIB	WILKES

LIB S 308 AUDIO-VISUAL SERVICES IN LIBRARIES.
3 HOURS, OR 1 UNIT
*ADDITIONAL HOUR ARRANGED FOR 1 UNIT CREDIT.

07949	LECT-DISC	*8-10	MTU TH	309	LIB	GOLDSTEIN

LIB S 402 STUDIES IN READING.
1 UNIT

07957	LECT-DISC	1-3	TU TH	227	LIB	LADLEY

LIB S 405 LIBRARY ADMINISTRATION.
1 UNIT

07965	LECT-DISC	3-5	M W	66	LIB	CHAIT

LIB S 406 LIBRARY SERVICE TO CHILDREN AND YOUNG ADULTS.
PREREQUISITE--LIB.S. 204 OR 405.
1 UNIT

07973	LECT-DISC	10-12	TU TH	227	LIB	LADLEY

LIB S 408 CATALOGING AND CLASSIFICATION, II.
PREREQUISITE--LIB.S. 407.
1 UNIT

07981	LECT-DISC	8-10	TU TH	314	LIB	HENDERSON

LIB S 410 ADULT EDUCATION AND LIBRARIES.
1 UNIT

07990	LECT-DISC	3-5	M W	309	LIB	GOLDSTEIN

LIB S 412 SCIENCE REFERENCE SERVICE.
1 UNIT

08004	LECT-DISC	11	M W F	314	LIB	JENKINS
		11-1230	TU TH	314	LIB	JENKINS

LIB S 424 GOVERNMENT PUBLICATIONS.
PREREQUISITE--LIB. S. 411 OR 412, OR CONSENT OF INSTRUCTOR.
1 UNIT
THIS COURSE MEETS SECOND FOUR WEEKS OF SUMMER SESSION.

08012	LECT-DISC	1-3	MTU THF	314	LIB	BROCK

LIB S 428 LIBRARY BUILDINGS.
PREREQUISITE--LIB.S. 405 OR CONSENT OF INSTRUCTOR.
1 UNIT

08021	LECT-DISC	10-12	TU F	429	LIB	CHAIT

LIB S 429 INFORMATION STORAGE AND RETRIEVAL.
PREREQUISITE--LIB. S. 405 AND CONSENT OF INSTRUCTOR.
1 UNIT

08039	LECT-DISC	3-5	M W	314	LIB	CARROLL

LIB S 430 ADVANCED REFERENCE.
PREREQUISITE--LIB.S. 424 OR CONSENT OF INSTRUCTOR.
1 UNIT

08047	LECT-DISC	3-5	TU TH	314	LIB	CARROLL

LIB S 432 HISTORY OF BOOKS AND PRINTING.
SAME AS COMM. 432.
1 UNIT

08055	LECT-DISC	8-10	W F	309	LIB	STEVENS

LIB S 433 ADVANCED SUBJECT BIBLIOGRAPHY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/2 UNIT
*SEC. C-CHEMISTRY
*SEC. D-EDUCATION
*SEC. G-LAW
*SEC. J-MATHEMATICS
*SECTION K-SLAVIC BIBLIOGRAPHY.

08063	LECT-DISC *D	ARR				STENSTROM

LIB S 434 LIBRARY SYSTEMS.
PREREQUISITE--LIB.S. 405 OR CONSENT OF INSTRUCTOR.
1 UNIT

08071	LECT-DISC	3-5	TU TH	429	LIB	BOB

LIB S 436 DEVELOPMENT OF THE LIBRARY CATALOG.
PREREQUISITE--LIB.S. 407, 408, OR CONSENT OF INSTRUCTOR.
1 UNIT

08080	LECT-DISC	10-12	M TH	429	LIB		JOLLEY

LIB S 443 CONTEMPORARY BOOK PUBLISHING.
1 UNIT
THIS COURSE MEETS FIRST FOUR WEEKS OF SUMMER SESSION.

08098	LECT-DISC	1-3	MTU THF	3140	6LIB		SCHOSSBERGER

COURSES FOR ADVANCED GRADUATES

LIB S 450 ADVANCED PROBLEMS IN LIBRARIANSHIP.
PREREQUISITE--A FIFTH-YEAR DEGREE IN LIBRARY SCIENCE, CONSENT OF ASSOCIATE DIRECTOR.
1/2 TO 2 UNITS
*SECTION K--1 UNIT.
*SECTION I OPEN ONLY TO PARTICIPANTS IN INSTITUTE FOR SPANISH AND LATIN AMERICAN LIBRARIANSHIP. CREDIT--1/2 TO 1 1/2 UNITS.

08101	CONF	J	ARR				STAFF
08119	LECT-DISC	*K	1-3	TU F	429	LIB	JOLLEY
08127	LECT-DISC	*I	10-12	MTUWTHF	43	L I R	DEAL

LIB S 499 499 THESIS RESEARCH.
MS CANDIDATES--0 TO 2 UNITS, PHD CANDIDATES--0 TO 4 UNITS

08135	CONF		ARR				STAFF

LINGUISTICS

DEPARTMENT OFFICE 309H D H

THE DEPARTMENT OF LINGUISTICS OFFERS A GRADUATE PROGRAM LEADING TO THE DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY. THE FOLLOWING FIELDS OF LINGUISTICS ARE AVAILABLE FOR CONCENTRATION--DESCRIPTIVE LINGUISTICS, HISTORICAL LINGUISTICS, AND INTERDISCIPLINARY STUDY IN PSYCHOLINGUISTICS, ETHNOLINGUISTICS, EXPERIMENTAL PHONETICS, AND AUTOMATA STUDIES.

UNDERGRADUATE PREPARATION FOR THE STUDY OF LINGUISTICS SHOULD INCLUDE THE EQUIVALENT OF AT LEAST THREE YEARS OF FOREIGN LANGUAGE EXPERIENCE, FOR HISTORICAL LINGUISTICS A BROAD BACKGROUND IN THE HUMANITIES AND SOCIAL STUDIES AND FOR DESCRIPTIVE LINGUISTICS THE EQUIVALENT OF GOOD UNDERGRADUATE TRAINING IN MATHEMATICS AND THE SCIENCES IS DESIRABLE. STUDENTS APPLYING FOR ADMISSION MUST HAVE AT LEAST A 3.75 GRADE POINT AVERAGE FOR THAT PORTION OF THE WORK WHICH REPRESENTS THE LAST SIXTY HOURS EARNED TOWARD THE BACHELORS DEGREE, EXCLUSIVE OF REQUIRED PHYSICAL EDUCATION, MILITARY TRAINING, RECREATIONAL ACTIVITIES IN THE ARTS, OR SPECIALIZED VOCATIONAL OR RELIGIOUS SUBJECTS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LING 300 INTRODUCTION TO LINGUISTICS.
SAME AS ANTH. 300.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

08143	LECT-DISC	3	MTUWTHF	312	D H		LEHMAN
		4	F	312	D H		

LING 302 COMPARATIVE LINGUISTICS.
PREREQUISITE--FULFILLMENT OF FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES OR THE EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

08151	LECT-DISC	9	MTUWTHF	252	ADMIN		KAHANE
		10	F	252	ADMIN		

```
LING  387     THE STRUCTURE OF ENGLISH.
              SAME AS ENGL. 387.
        3 HOURS, OR 3/4 UNIT
        *ONE HOUR TO BE ARRANGED.
      08160       LECT-DISC          *1       MTUWTHF    252  ADMIN          ZWICKY
                                      2             F    252  ADMIN
```

COURSES FOR GRADUATES

```
LING  490     SPECIAL TOPICS IN LINGUISTICS.
        1/2 TO 2 UNITS
      08178       CONF               ARR                                      STAFF

LING  499     THESIS RESEARCH.
        0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
      08186       CONF               ARR                                      STAFF
```

MARKETING

DEPARTMENT OFFICE 340 COM W

COURSES FOR ADVANCED UNDERGRADUATES

```
MKTG  201     PRINCIPLES OF MARKETING.
        PREREQUISITE--ECON. 172 OR EQUIVALENT.
        *CREDIT IS NOT GIVEN FOR BOTH MKTG. 201 AND 272.
        *3 HOURS
      08194       LECT-DISC  B        9        MTUWTHF    170  COM W          MONROE
                             B        4         TU        170  COM W          MONROE

MKTG  294     SENIOR RESEARCH.
        PREREQUISITE--CUMULATIVE GRADE POINT AVERAGE OF 4.0 OR HONORS IN
        THE JUNIOR YEAR OR CONSENT OF INSTRUCTOR.  SENIOR STANDING.
        2 TO 4 HOURS
      08207       CONF               ARR
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MARKETING MAJORS WILL NOT RECEIVE GRADUATE CREDIT FOR THESE COURSES

```
MKTG  320     MARKETING RESEARCH.
        PREREQUISITE--MKTG. 201.
        *NO GRADUATE CREDIT FOR MARKETING MAJORS.
        *3 HOURS OR 1/2 UNIT
      08215       LECT-DISC  D       11       MTUWTHF    170  COM W          FREDERICK
                             D       12       M          170  COM W          FREDERICK

MKTG  380     ADVANCED MARKETING MANAGEMENT.
        PREREQUISITE--MKTG. 320 AND 337.
        *NO GRADUATE CREDIT FOR MARKETING MAJORS.
        *3 HOURS, OR 1/2 UNIT
      08223       LECT-DISC  C       10       MTUWTHF    170  COM W          FREDERICK
                             C       12        TU        170  COM W          FREDERICK
```

COURSES FOR GRADUATES

```
MKTG  402     MARKETING METHODS AND PROBLEMS.
        1 UNIT
      08231       LECT-DISC          8-10     M   TH      36  COM W          MITCHELL

MKTG  493     RESEARCH IN SPECIAL FIELDS.
        1/4 TO 2 UNITS
      08240       CONF               ARR                                      MITCHELL

MKTG  499     THESIS RESEARCH.
        0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
      08258       DISC               4-6      M          36  COM W          MITCHELL
```

MATHEMATICS

DEPARTMENT OFFICE 273 A H

MAJOR IN MATHEMATICS

MAJOR--TWENTY-THREE HOURS IN MATHEMATICS, EXCLUDING COURSES WITH NUMBERS LESS THAN 130, AND INCLUDING THREE COURSES CHOSEN FROM MATH. 317, 318, 327, 328, 332, 333, 347, 348, 353, 354, 387.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ACCOUNTANCY, ASTRONOMY, CHEMISTRY, ECONOMICS, FINANCE, PHILOSOPHY, PHYSICS, PSYCHOLOGY, STATISTICS--MATH. 161, 361, 362, 363, 364, 375, SURVEYING, THEORETICAL AND APPLIED MECHANICS.
DEPARTMENTAL HONORS. ENTERING STUDENTS WITH SUPERIOR MATHEMATICAL ABILITY SHOULD APPLY TO THE DEPARTMENT OF MATHEMATICS, 273 ALTGELD HALL, FOR INFORMATION REGARDING THE HONORS COURSE, MATH. 149. INFORMATION REGARDING REQUIREMENTS FOR GRADUATION WITH DISTINCTION IN MATHEMATICS IS AVAILABLE FROM DR. J. W. PETERS, 267 ALTGELD HALL

NOTE--AN ENTERING STUDENT WITH AN ADEQUATE PREPARATION IN HIGH SCHOOL MATHEMATICS SHOULD ENROLL IN ANALYTIC GEOMETRY, MATH. 122 OR 123, DURING THE FIRST SEMESTER, AND IN CALCULUS, MATH. 132 OR 133, DURING THE SECOND SEMESTER OF HIS FRESHMAN YEAR. ADMISSION TO ANALYTIC GEOMETRY NORMALLY REQUIRES A PASSING GRADE ON THE MATHEMATICS PLACEMENT TEST. A STUDENT INELIGIBLE FOR ANALYTIC GEOMETRY SHOULD ENROLL IN ALGEBRA, MATH. 111 OR 112, AND TRIGONOMETRY, MATH. 114, DURING HIS FIRST SEMESTER.

UNDERGRADUATE STUDENTS INTENDING TO TAKE ADVANCED WORK OR A MAJOR IN MATHEMATICS SHOULD COMPLETE THE SECOND SEMESTER OF CALCULUS, MATH. 142 OR 143, AS EARLY AS POSSIBLE. OF THE VARIOUS COURSES OFFERED AT THE 300 LEVEL, THE INTRODUCTORY COURSES IN ALGEBRA, 317, 318, IN GEOMETRY, 327, 328, IN TOPOLOGY, 332, 333, AND IN ANALYSIS, 347, 348 ARE BASIC FOR MORE ADVANCED WORK IN MATHEMATICS. MANY OF THE OTHER 300 LEVEL COURSES ARE DESIGNED TO SERVE STUDENTS WHO ANTICIPATE A RELATIVELY EARLY TERMINATION OF THEIR COURSE WORK IN MATHEMATICS, THESE STUDENTS MIGHT PREFER THE COURSES THAT RELATE INTERMEDIATE MATHEMATICS TO THEIR SPECIALIZED AREAS OF INTEREST. STUDENTS PREPARING TO TEACH HIGH SCHOOL OR COLLEGE MATHEMATICS, OR THOSE INTERESTED IN MATHEMATICS AS A CAREER SHOULD CONSULT WITH DR. J. W. PETERS, 267 ALTGELD HALL, CONCERNING THEIR PROGRAM AT THE EARLIEST POSSIBLE MOMENT AFTER ENTERING THE UNIVERSITY.

MAJOR IN STATISTICS

MAJOR--TWELVE HOURS BEYOND CALCULUS INCLUDING MATH. 315, 347, 363, AND THREE OTHER HOURS OF 300 COURSES IN STATISTICS IN THE DEPARTMENT OF MATHEMATICS.

MINORS--TWENTY HOURS IN ONE SUBJECT APPROVED BY THE DEPARTMENT OF MATHEMATICS. OF THESE TWENTY HOURS NOT MORE THAN NINE MAY BE IN STATISTICAL METHODS, AND MATH. 161 MAY BE TAKEN AS THREE OF THESE HOURS. THE COURSES NOT EMPHASIZING STATISTICAL METHODS SHOULD BE CHOSEN SO THAT COURSES ON THE 400 LEVEL CAN BE TAKEN IF THE STUDENT ENTERS THE GRADUATE COLLEGE.

MAJOR IN ACTUARIAL SCIENCE

MAJOR--ONE YEAR OF CALCULUS AND AT LEAST FIVE COURSES CHOSEN FROM THE FOLLOWING--MATH. 195, 311, 312, 362, 363, 371, 372,

MINORS--TWENTY HOURS CHOSEN FROM THE FOLLOWING--FIN. 258, 259, 260, 262, 270, 360, 363, 370.

NOTE--STUDENTS ARE URGED TO ELECT ACCY. 201 AND I. ADM. 261 IN THEIR JUNIOR YEAR.

MATH 111 ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1 UNIT, PLANE GEOMETRY, 1 UNIT.
STUDENTS HAVING 1-1/2 OR MORE UNITS OF HIGH SCHOOL ALGEBRA MAY NOT TAKE THIS COURSE UNLESS THEY HAVE THE APPROVAL OF THEIR COLLEGE OFFICE.
CREDIT IS NOT GIVEN FOR BOTH MATH. 111 AND 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

08266	LECT-DISC	A1	8-10	MTUWTHF	443	A H

MATH 112 COLLEGE ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, PLANE GEOMETRY, 1 UNIT.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 111 AND 112.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

08274	LECT-DISC	B1	9	MTUWTHFS	243	A H

MATH 114 PLANE TRIGONOMETRY.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, OR REGISTRATION IN MATH. 111, PLANE GEOMETRY, 1 UNIT.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 1 HOUR CREDIT.
*2 HOURS

08282	LECT-DISC	A1	8	TUWTHF	145	A H
08291	LECT-DISC	D1	11	TUWTHF	145	A H

MATH 123 ANALYTIC GEOMETRY.
PREREQUISITE--MATH. 111 OR 112, AND 114.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 4 HOURS CREDIT.
*5 HOURS

08303	LECT-DISC	A1	8-10	MTUWTHF	147	A H
08311	LECT-DISC	C1	10-12	MTUWTHF	147	A H
08320	LECT-DISC	E1	1-3	MTUWTHF	147	A H

MATH 124 INTRODUCTORY ANALYSIS FOR SOCIAL SCIENTISTS, I.
PREREQUISITE--MATH. 111 OR 112.
*CREDIT IS NOT GRANTED FOR MATH. 124-134 IN ADDITION TO MATH. 358-359.
*3 HOURS

08338	LECT-DISC	C1	10	MTUWTHFS	243	A H

MATH 133 CALCULUS, I.
PREREQUISITE--MATH. 122 OR 123.
3 HOURS

08346	LECT-DISC	A1	8	MTUWTHFS	156	ADMIN
08354	LECT-DISC	B1	9	MTUWTHFS	341	A H
08362	LECT-DISC	D1	11	MTUWTHFS	341	A H

MATH 134 INTRODUCTORY ANALYSIS FOR SOCIAL SCIENTISTS, II.
PREREQUISITE--MATH. 124.
*CREDIT IS NOT GRANTED FOR MATH. 124-134 IN ADDITION TO MATH. 358-359.
*4 HOURS

08371	LECT-DISC	B1	9-1030	MTUWTHF	184	L H

MATH 142 CALCULUS, II.
PREREQUISITE--MATH. 132.
3 HOURS

08389	LECT-DISC	B1	9	MTUWTHFS	145	A H

MATH 143 CALCULUS, II.
PREREQUISITE--MATH. 133.
5 HOURS

08397	LECT-DISC	B1	9-11	MTUWTHF	241	A H

MATH 195 INTRODUCTION TO AUTOMATIC DIGITAL COMPUTING.
PREREQUISITE--SOPHOMORE STANDING AND ONE YEAR OF COLLEGE MATHEMATICS, INCLUDING DIFFERENTIAL CALCULUS.
3 HOURS

08400	LECT-DISC	F1	2-4	M W F	314	A H	HAMILTON

COURSES FOR ADVANCED UNDERGRADUATES

MATH 202 MATHEMATICS FOR ELEMENTARY TEACHERS, I.
PREREQUISITE--JUNIOR STANDING IN ELEMENTARY EDUCATION.
*NO CREDIT FOR L. A. AND S. STUDENTS.
*5 HOURS

08418	LECT-DISC	C1	10-12	MTUWTHF	156	ADMIN		ARMSTRONG

MATH 291 THESIS AND READING COURSE.
PREREQUISITE--MATH. 347 WITH GRADE OF B OR BETTER, OR CONSENT OF MATHEMATICS HONORS COMMITTEE.
2 HOURS

08426	DISC		ARR					

MATH 298 SUMMER PROGRAM IN INDEPENDENT STUDY.
PREREQUISITE--SELECTION BY HONORS COMMITTEE UPON FORMAL APPLICATION FROM STUDENT.
6 HOURS

08434	DISC		ARR					

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MATH 300 THE THEORY OF SETS AND THE REAL NUMBER SYSTEM.
PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT
*SECTION E1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.

08442	LECT-DISC	C1	10	MTUWTHF	343	A H		SCHROER
		C1	3	TH	343	A H		
08451	LECT-DISC	*E1	1250-150	MTUWTHF	314	A H		

MATH 302 TOPICS IN GEOMETRY.
PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

08469	LECT-DISC	A1	8	MTUWTHF	241	A H		
		A1	3	TU	241	A H		

MATH 306 SELECTED MATHEMATICAL TOPICS FOR SECONDARY SCHOOL TEACHERS, I.
PREREQUISITE--ONE YEAR OF SECONDARY SCHOOL TEACHING IN MATHEMATICS OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*SECTIONS B1 AND B2 ARE 12 WEEK COURSES FOR TEACHERS ONLY BEGINNING JUNE 13.

08477	LECT-DISC	*B1	9	MTUWTHF	138	ADMIN		
08485	LECT-DISC	*B2	9	MTUWTHF	156	ADMIN		

MATH 315 LINEAR TRANSFORMATIONS AND MATRICES.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

08493	LECT-DISC	D1	11	MTUWTHFS	314	A H		P MONTAGUE

MATH 317 INTRODUCTION TO HIGHER ALGEBRA, I.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED.

08506	LECT-DISC	E1	*1	MTUWTHF	156	ADMIN		SACHS

MATH 318 INTRODUCTION TO HIGHER ALGEBRA, II.
PREREQUISITE--MATH. 317.
3 HOURS, OR 1 UNIT
*SECTION B1 IS A TWELVE WEEK COURSE FOR TEACHERS ONLY BEGINNING JUNE 13.

08522	LECT-DISC	*B1	9	MTUWTH	133	E E B		
08514	LECT-DISC	D1	11	MTUWTHF	133	E E B		SANKARAN
		D1	3	M	133	E E B		

MATH 332 INTRODUCTION TO SET THEORY AND TOPOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 347.
3 HOURS, OR 1 UNIT

08531	LECT-DISC	C1	10	MTUWTHF	245	A H		DOSS
		C1	3	TH	245	A H		

MATH 343 ADVANCED CALCULUS.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

08549	LECT-DISC	B1	9	MTUWTHFS	314	A	H	PETERS

MATH 345 DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS.
PREREQUISITE--ONE YEAR OF CALCULUS.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 345 AND MATH. 349.
*3 HOURS, OR 1 UNIT

08557	LECT-DISC	C1	10	MTUWTHFS	314	A	H	FERGUSON

MATH 346 COMPLEX VARIABLES AND APPLICATIONS.
PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND MATH. 348.
*3 HOURS, OR 1 UNIT

08565	LECT-DISC	A1	8	MTUWTHFS	314	A	H	SHERBERT

MATH 347 INTRODUCTION TO HIGHER ANALYSIS--REAL VARIABLES.
PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

08573	LECT-DISC	A1	8	MTUWTHF	245	A	H	R SINGH
		A1	3	TU	245	A	H	

MATH 348 INTRODUCTION TO HIGHER ANALYSIS--COMPLEX VARIABLES.
PREREQUISITE--MATH. 347.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND 348.
*3 HOURS, OR 1 UNIT

08581	LECT-DISC	B1	9	MTUWTHF	245	A	H	
		B1	3	W	245	A	H	

MATH 353 ELEMENTARY THEORY OF NUMBERS, I.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

08590	LECT-DISC	C1	10	MTUWTHF	247	A	H	IRMA REINER
		C1	3	TH	247	A	H	

MATH 363 ADVANCED STATISTICS, I.
PREREQUISITE--ONE YEAR OF CALCULUS.
3 HOURS, OR 1 UNIT

08602	LECT-DISC	B1	9	MTUWTHF	247	A	H	GHOSH
		B1	3	W	247	A	H	

MATH 387 INTRODUCTION TO NUMERICAL ANALYSIS.
PREREQUISITE--MATH. 195 AND A COURSE IN DIFFERENTIAL EQUATIONS, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1 UNIT

08611	LECT-DISC	B1	9	MTUWTHF	347	A	H	BELFORD
		B1	3	W	347	A	H	

MATH 388 MATHEMATICAL METHODS IN ENGINEERING AND SCIENCE.
PREREQUISITE--MATH. 343.
3 HOURS, OR 1 UNIT

08629	LECT-DISC	D1	11	MTUWTHF	343	A	H	L SESHU
		D1	3	M	343	A	H	

COURSES FOR GRADUATES

MATH 401 SECOND COURSE IN ABSTRACT ALGEBRA, I.
PREREQUISITE--MATH. 317 AND 318.
1 UNIT

08637	LECT-DISC	D1	11	MTUWTHF	241	A	H	CHAWLA

MATH 402 SECOND COURSE IN ABSTRACT ALGEBRA, II.
PREREQUISITE--MATH. 401.
1 UNIT

08645	LECT-DISC	D1	11	MTUWTHF	245	A	H	EAGON

MATH 404 GROUP THEORY.
PREREQUISITE--MATH. 401 AND 402 OR EQUIVALENT.
1 UNIT

08653	LECT-DISC	D1	11	MTUWTHF	247	A	H	HERZOG

```
MATH  416     ADVANCED TOPICS IN ABSTRACT ALGEBRA.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         1 UNIT
         *SECTION *C1 CONSIDERS MODULAR REPRESENTATION OF GROUPS.
       08661      LECT-DISC  C1       10       MTUWTHF    347  A H            IRVING REINER


MATH  430     ELEMENTARY GEOMETRY FROM A MODERN VIEWPOINT.
         PREREQUISITE--ONE YEAR OF EXPERIENCE IN THE TEACHING OF HIGH
         SCHOOL MATHEMATICS, CONSENT OF INSTRUCTOR.
         1 UNIT
         THIS IS A TWELVE WEEK COURSE FOR TEACHERS ONLY BEGINNING JUNE 13.
       08670      LECT-DISC  D1       11       MTUWTHF    317  G H


MATH  440     THEORY OF FUNCTIONS OF A COMPLEX VARIABLE, I.
         PREREQUISITE--MATH. 348 OR CONSENT OF INSTRUCTOR.
         1 UNIT
       08688      LECT-DISC  B1        9       MTUWTHF    445  A H            MENDEL


MATH  441     REAL ANALYSIS, I.
         PREREQUISITE--MATH. 347 OR EQUIVALENT.
         1 UNIT
       08696      LECT-DISC  A1        8       MTUWTHF    247  A H            EUSTICE


MATH  442     REAL ANALYSIS, II.
         PREREQUISITE--MATH. 441.
         1 UNIT
       08709      LECT-DISC  E1        1       MTUWTHF    247  A H            ALEXANDER


MATH  444     PARTIAL DIFFERENTIAL EQUATIONS.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         1 UNIT
       08717      LECT-DISC  C1       10       MTUWTHF    341  A H            BANK


MATH  447     BANACH SPACES.
         PREREQUISITE--MATH. 442.
         1 UNIT
       08725      LECT-DISC  A1        8       MTUWTHF    243  A H            PERESSINI


MATH  455     MATHEMATICAL METHODS OF PHYSICS, I.
         PREREQUISITE--MATH. 348.
         1 UNIT
       08733      LECT-DISC  B1        9       MTUWTHF    447  A H            KETCHUM


MATH  468     TOPICS IN ANALYSIS.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         1 UNIT
         *SECTION F1 IS A 12 WEEK COURSE FOR TEACHERS ONLY.  STARTS JUNE 13.
       08741      LECT-DISC *F1        2       MTUWTH     156  ADMIN


MATH  490     READING COURSE.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         1 TO 2 UNITS
       08750      DISC               ARR


MATH  499     THESIS RESEARCH.
         PREREQUISITE--CONSENT OF INSTRUCTOR.
         0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
       08768      DISC               ARR
```

MECHANICAL ENGINEERING

DEPARTMENT OFFICE 144 M E B

COURSES FOR ADVANCED UNDERGRADUATES

M E 224 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 221, OR M E 222, T A M 221, CREDIT OR REGISTRATION IN T A M 223.
3 HOURS

08776	LECT-DISC	P	10-12	MTUWTHFS	336	M E B	SCHMIDT

M E 234 HEAT TREATMENT OF METALS.
PREREQUISITE--T A M 221, CREDIT OR REGISTRATION IN M E 224 AND T A M 223.
3 HOURS

08784	LECT-DISC	P	1	MTUWTH	110	M E B	RAMALINGAM AND SINGER
	LAB	P	2-5	TU TH	110	M E B	
		P	2-5	TU TH	114	M E B	

M E 263 APPLICATION OF ENERGY CONCEPTS TO POWER PROCESSES.
PREREQUISITE--M.E. 206 AND 212.
5 HOURS

08792	LECT-DISC	P	7	MTUWTH	204	M E L	HEBRANK
		P	8-10	F	204	M E L	
	LAB	P	8-10	MTUWTH	204	M E L	
		P	8-10	MTUWTH	101	M E B	
		P	8-10	MTUWTH	M E LAB		

M E 264 HEAT POWER LABORATORY.
PREREQUISITE--M E 212 AND 263.
3 HOURS

08805	LAB	P	8-10	MTUWTHFS	204	M E L	HULL
		P	8-10	MTUWTHFS	101	M E B	
		P	8-10	MTUWTHFS	M E LAB		

M E 271 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 224.
3 HOURS

08813	LECT-DISC	P	10-12	MTUWTHFS	343	M E B	BAYNE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

M E 341 ENGINEERING ANALYSIS AND DESIGN.
PREREQUISITE--M E 271, SENIOR STANDING, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT
THIS COURSE FOR THE SUMMER OF 1966 WILL BE OFFERED ONLY TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. COURSE MAY BE REPEATED FOR A TOTAL OF 4 UNITS.

08821	LECT-DISC	P	8-10	MTUWTHF	343	M E B	BROGHAMER

COURSES FOR GRAUDATES

M E 408 LABORATORY INVESTIGATIONS IN THERMODYNAMICS.
PREREQUISITE--ONE-YEAR COURSE IN THERMODYNAMICS, ONE HALF-YEAR COURSE IN POWER LABORATORY.
1/2 TO 1 1/2 UNITS

08830	CONF	P	ARR				STAFF
08848	CONF	Q	ARR				STAFF

M E 409 LABORATORY INVESTIGATIONS IN FLUID FLOW, HEAT TRANSFER, AND CUMBUSTION
PREREQUISITE--COURSES IN THERMODYNAMICS AND FLUID MECHANICS.
1/2 TO 1 1/2 UNITS

08856	CONF	P	ARR				STAFF
08864	CONF	Q	ARR				STAFF

M E 428 LABORATORY INVESTIGATIONS IN REFRIGERATION.
1/2 TO 1 1/2 UNITS

08872	CONF	P	ARR	STAFF
08881	CONF	Q	ARR	STAFF

M E 429 LABORATORY INVESTIGATIONS IN HEATING AND AIR CONDITIONING.
PREREQUISITE--TWO SEMESTERS OF POWER LABORATORY OR EQUIVALENT.
1/2 TO 1 1/2 UNITS

08899	CONF	P	ARR	STAFF
08901	CONF	Q	ARR	STAFF

M E 438 LABORATORY INVESTIGATIONS IN POWER MACHINERY.
PREREQUISITE--ONE-YEAR COURSE IN POWER LABORATORY.
1/2 TO 1 1/2 UNITS

08910	CONF	P	ARR	STAFF
08928	CONF	Q	ARR	STAFF

M E 448 LABORATORY INVESTIGATIONS IN MACHINE DESIGN.
1/2 TO 1 1/2 UNITS, SUMMER--1 UNIT

08936	CONF	P	ARR	STAFF
08944	CONF	Q	ARR	STAFF

M E 458 LABORATORY INVESTIGATIONS IN PRODUCTION.
1/2 TO 1 1/2 UNITS

08952	CONF	P	ARR	STAFF
08961	CONF	Q	ARR	STAFF

M E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

08979	CONF	ARR	STAFF

MEDIEVAL CIVILIZATION STUDIES PROGRAM

MAJOR--STUDENTS WHO ELECT MEDIEVAL CIVILIZATION AS A MAJOR MUST COMPLETE THE LOWER DIVISION REQUIREMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES AND FORTY SEMESTER HOURS--WHICH SATISFIES BOTH MAJOR AND MINOR REQUIREMENTS--IN COURSES CHOSEN FROM THE FOLLOWING LIST--ARCH. 214, ART 312, CLASS 301, 302, ENGL. 311, HIST. 301, 302, 303, 304, 305, 333, 345, ITAL. 311, 312, LAT. 104, PHIL. 304, SPCH. 361. OTHER COURSES MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ADVISER--ADVANCED READING COURSES IN ANY FOREIGN LANGUAGE OFFERED BY THE UNIVERSITY ARE STRONGLY RECOMMENDED.
ADVISER--PROFESSOR DENO GEANAKOPLOS, 353 ARMORY.

METALLURGICAL ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR ADVANCED UNDERGRADUATES

MET E 299 THESIS.
PREREQUISITE--SENIOR STANDING, APPROVAL OF HEAD OF DEPARTMENT.
1 TO 3 HOURS

08987	CONF	ARR	STAFF

COURSES FOR GRADUATES

MET E 485 METALLURGICAL ENGINEERING PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

08995	CONF	ARR	STAFF

MET E 486 LABORATORY INVESTIGATIONS IN METALLURGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 OR 1/2 UNIT OF CREDIT

09000	LAB	ARR	STAFF

MET E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
09018 CONF ARR STAFF

MICROBIOLOGY

DEPARTMENT OFFICE 127 BUR HALL

MAJOR--TWENTY HOURS OF MICROBIOLOGY, INCLUDING EITHER MCBIO. 100 AND 101, OR MCBIO. 200 AND 201. AN INTRODUCTORY SEQUENCE OF BIOLOGY 110 AND BIOLOGY 111 AND MCBIO. 200 AND 201 ARE RECOMMENDED FOR MAJORS. BOT. 210--ZOOL. 210--AND CHEM. 340,350, AND 355 MAY BE SUBSTITUTED FOR MICROBIOLOGY COURSES TO THE EXTENT OF FIVE HOURS AS PART OF THE MAJOR. QUANTITATIVE AND ORGANIC CHEMISTRY, COLLEGE ALGEBRA, AND TRIGONOMETRY ARE REQUIRED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, BIOLOGY, BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, PHYSICS, PHYSIOLOGY, AND ZOOLOGY. NO COURSE MAY APPLY TO BOTH THE MAJOR AND THE MINOR.

COURSES FOR UNDERGRADUATES

MCBIO 100 INTRODUCTORY MICROBIOLOGY.
CREDIT IS NOT GIVEN FOR BOTH MCBIO. 100 AND MCBIO. 200.
3 HOURS
09026 LECT 8 MTUWTHF 124 BUR HALL MCCAMISH

MCBIO 101 INTRODUCTORY EXPERIMENTAL MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 100.
CREDIT IS NOT GIVEN FOR BOTH MCBIO. 101 AND MCBIO. 201.
2 HOURS
09034 LAB 9-12 M W 242 BUR HALL MCCAMISH AND
9-11 F 242 BUR HALL ASSISTANTS

COURSES FOR ADVANCED UNDERGRADUATES

MCBIO 207 RESEARCH AND SPECIAL PROBLEMS.
PREREQUISITE--FIFTEEN HOURS OF MICROBIOLOGY, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 10 HOURS.
*3 TO 5 HOURS.
09042 LAB-DISC ARR BUR HALL STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MCBIO 311 FOOD AND INDUSTRIAL MICROBIOLOGY.
PREREQUISITE--MCBIO. 101 OR 201 OR 309 OR EQUIVALENT AND CREDIT OR REGISTRATION IN ORGANIC CHEMISTRY, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT
09051 LECT 8 MTUWTHF 136 BUR HALL CLARK

MCBIO 312 TECHNIQUES OF APPLIED MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 311.
2 HOURS, OR 1/2 UNIT
09069 LAB 9-12 M W F 202 BUR HALL CLARK AND HELM

COURSES FOR GRADUATES

MCBIO 490 INDIVIDUAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
09077 LAB ARR BUR HALL STAFF

MCBIO 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 UNITS.

09085	CONF		ARR	BUR HALL	STAFF

MILITARY SCIENCE

DEPARTMENT OFFICE 110 ARMORY

BASIC MILITARY CURRICULUM

ENTERING MALE STUDENTS WHO ARE PHYSICALLY QUALIFIED AND WHO HAVE BEEN SELECTED FOR ENROLLMENT MUST, IN ADDITION TO REQUIRED MILITARY SCIENCE COURSES, REGISTER IN EITHER A NATURAL SCIENCE OR SOCIAL SCIENCE GENERAL EDUCATION SEQUENCE ACCEPTABLE TO THE MILITARY SCIENCE DEPARTMENT AND THE STUDENTS COLLEGE. AN ADDITIONAL REQUIREMENT FOR COMMISSIONING IS THE SUCCESSFUL COMPLETION OF PHYSICAL EDUCATION COURSE, P E 120.

COMMON COURSES

MIL S 100 LEADERSHIP LABORATORY.
PREREQUISITE--APPROVAL OF THE PROFESSOR OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09093	LAB	A	12	MTU		ARMORY FLOOR	STAFF
09106	LAB	B	3		F	ARMORY FLOOR	STAFF

COURSES FOR UNDERGRADUATES

MIL S 101 INTRODUCTION TO MILITARY SCIENCE.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09114	LECT-DISC	A	4	TU TH	182	ARMORY	STAFF
09122	LECT-DISC	B	10	W	182	ARMORY	STAFF

MIL S 102 MILITARY MAP AND AERIAL PHOTOGRAPH ANALYSIS.
CREDIT OR REGISTRATION IN MIL S 101, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09131	LECT-DISC	A	9	TU TH	182	ARMORY	STAFF
09149	LECT-DISC	B	1	W F	182	ARMORY	STAFF

MIL S 103 INTRODUCTION TO TACTICS.
PREREQUISITE--CREDIT OR REGISTRATION IN MIL S 102, AND CONCURRENT ENROLLMENT IN MIL. S. 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09157	LECT-DISC	A	11	M W	183	ARMORY	STAFF
09165	LECT-DISC	B	2	TU TH	182	ARMORY	STAFF

SECOND YEAR STUDENTS SELECTED FOR CONTINUATION MUST, IN ADDITION TO THE REQUIRED MILITARY SCIENCE COURSES, REGISTER IN EITHER A NATURAL SCIENCE OR SOCIAL SCIENCE GENERAL EDUCATION SEQUENCE ACCEPTABLE TO THE MILITARY SCIENCE DEPARTMENT AND THE STUDENTS COLLEGE.

MIL S 111 PRINCIPLES OF MILITARY LEADERSHIP.
PREREQUISITE--MIL S 103, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09173	LECT-DISC	A	1	TU TH	183	ARMORY	STAFF
09181	LECT-DISC	B	9	W F	183	ARMORY	STAFF

MIL S 112 AMERICAN MILITARY HISTORY.
PREREQUISITE--MIL S 103, CONCURRENT ENROLLMENT IN MIL S 100, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
2 HOURS

09190	LECT-DISC	A	8	MTUWTH	182	ARMORY	STAFF
09202	LECT-DISC	B	3	MTUWTH	182	ARMORY	STAFF

ADVANCED MILITARY CURRICULUM

SELECTED MALE STUDENTS WHO HAVE COMPLETED THE BASIC MILITARY COURSE OR ITS EQUIVALENT, AND WHO HAVE SATISFACTORILY PASSED PHYSICAL AND SCREENING EXAMINATIONS MAY APPLY FOR ENROLLMENT IN THE ADVANCED MILITARY CURRICULUM. EACH ADVANCED MILITARY CURRCIULUM STUDENT IS PAID A SUBSISTENCE ALLOWANCE. HE MUST ATTEND ROTC SUMMER TRAINING CAMP BETWEEN HIS FIRST AND SECOND YEAR IN THE ADVANCED PROGRAM. SUCCESSFUL COMPLETION OF THE CURRICULUM BY SELECTED STUDENTS NORMALLY RESULTS IN A COMMISSION AS A SECOND LIEUTENANT, U. S. ARMY RESERVE. SELECTED STUDENTS MEETING THE REQUIREMENTS MAY BE COMMISSIONED IN THE REGULAR ARMY.

STUDENTS ENROLLED IN THE REQUIRED MILITARY SCIENCE COURSES MUST, IN ADDITION, ENROLL IN THE THIRD AND IN THE FOURTH YEAR IN AN APPROVED COURSE OF ANOTHER DEPARTMENT. SELECTION OF THESE COURSES MUST BE APPROVED BY THE MILITARY SCIENCE DEPARTMENT ADVISOR AND BE ACCEPTABLE TO THE STUDENTS MAJOR DEPARTMENT.

COURSES FOR ADVANCED UNDERGRADUATES

MIL S 201 PRINCIPLES OF MILITARY INSTRUCTION.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, MIL S 111 AND 112 OR EQUIVALENT, CONCURRENT ENROLLMENT IN MIL S 100.
1 HOUR

09211	LECT-DISC	A	10	M W	183	ARMORY	STAFF
09229	LECT-DISC	B	2	M W	183	ARMORY	STAFF

MIL S 203 U. S. ARMY AND NATIONAL SECURITY.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, MIL. SCI. 111 AND 112 OR EQUIVALENT, CONCURRENT ENROLLMENT IN MIL. SCI. 100.
1 HOUR

09237	LECT-DISC	A	11	TU TH	183	ARMORY	STAFF
09245	LECT-DISC	B	2	M W	182	ARMORY	STAFF

MIL S 210 MILITARY LAW.
PREREQUISITE--MIL S 202 AND CONCURRENT ENROLLMENT IN MIL S 100.
1 HOUR

09253	LECT-DISC	A	10	TU TH	183	ARMORY	STAFF
09261	LECT-DISC	B	2	TU TH	183	ARMORY	STAFF

MIL S 211 PROSEMINAR.
PREREQUISITE--CREDIT OR REGISTRATION IN MIL. SCI. 210, CONCURRENT ENROLLMENT IN MIL. SCI. 100.
1 HOUR

09270	LECT-DISC	A	4	M W	183	ARMORY	STAFF
09288	LECT-DISC	B	12	W F	183	ARMORY	STAFF

MINING ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR GRADUATES

MIN E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS, SUMMER -- 1 UNIT
09296 CONF ARR STAFF

MIN E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
09309 CONF ARR STAFF

MUSIC

DEPARTMENT OFFICE 100 S M H

COURSES FOR UNDERGRADUATES

MUSIC 101 THEORY OF MUSIC, I.
FOR NON-MUSIC STUDENTS.
PREREQUISITE--MUSIC 100 OR EQUIVALENT.
3 HOURS
09317 LECT-DISC A 8-10 MTUWTHF 8 S A FARRELL

MUSIC 102 THEORY OF MUSIC, II.
PREREQUISITE--MUSIC 101.
3 HOURS
09325 LECT-DISC A 9 MTUWTHF 103 S M H FREDRICKSON

MUSIC 106 COMPOSITION.
PREREQUISITE--QUALIFYING EXAMINATION IN COMPOSITION, TO BE ADMINISTERED BY THE THEORY-COMPOSITION FACULTY.
2 HOURS, SUMMER--2, 3, OR 4 HOURS
09333 CONF A ARR 203 T A FREDRICKSON

MUSIC 107 EAR TRAINING, SIGHT SINGING, AND KEYBOARD HARMONY, I.
PREREQUISITE--MUSIC 101.
1 HOUR
09341 LAB-DISC A 10 TUWTHF 103 S M H FREDRICKSON

MUSIC 130 INTRODUCTION TO THE ART OF MUSIC, I.
FOR NON-MUSIC STUDENTS ONLY.
3 HOURS
09350 LECT-DISC A 9 TUWTHF 25 S M H REVITT

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 241 MUSIC FOR ELEMENTARY TEACHERS, II.
PREREQUISITE--MUSIC 240. REQUIRED FOR STATE ELEMENTARY SCHOOL CERTIFICATE BUT NO CREDIT GRANTED IN SCHOOL OF MUSIC.
3 HOURS
09368 LECT-DISC A 1 MTUW F 100 S H OMER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 301 FUGUE.
PREREQUISITE--MUSIC 300 AND/OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT
09376 LECT-DISC A 11 MTUWTHF 106 S M H KESSLER

MUSIC 306 COMPOSITION.
PREREQUISITE--MUSIC 104 OR 106 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT

09384	CONF	A	ARR		108	S M H		KESSLER
09392	CONF	B	ARR		203	T A		FREDRICKSON

MUSIC 311 MUSIC IN THE RENAISSANCE.
PREREQUISITE--MUSIC 131 OR 214 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

09405	LECT-DISC	A	9	TUWTHF	104	1203 W NEV		RINGER

MUSIC 313 MUSIC OF THE NINETEENTH AND TWENTIETH CENTURIES.
PREREQUISITE--MUSIC 131 OR 214 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

09413	LECT-DISC	A	10	TUWTHF	104	1203 W NEV		REVITT

MUSIC 330 APPLIED MUSIC PEDAGOGY.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 HOURS, OR 1 UNIT
*2 HOURS, OR 1/2 UNIT
*SECTION-A-IS FOR PIANO MAJORS. SECTION-B-IS FOR STRING MAJORS.
SECTION-C-IS FOR VOICE MAJORS.

09421	LAB-DISC	*A	9	TUWTHF	5	P A		RUPPEL
09430	LAB-DISC	*B	ARR		202	S A		ROLLAND AND FARMER
09448	LAB-DISC	*C	ARR		210	S H		G WILSON

MUSIC 333 CHURCH MUSIC TECHNIQUES.
PREREQUISITE--MUSIC 332 OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

09456	LECT-DISC	A	3	MTUWTH	106	S M H		HAMILTON

MUSIC 341 ADVANCED INSTRUMENTAL ADMINISTRATION.
PREREQUISITE--ADVANCED UNDERGRADUATE OR GRADUATE WITH MAJOR WORK OR EXPERIENCE IN BAND OR ORCHESTRA.
4 HOURS, OR 1 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED

09464	LECT-DISC	A	*10-12	MTUWTH	228	BAND		KISINGER

MUSIC 345 TEACHING TECHNIQUES OF MUSIC THEORY.
PREREQUISITE--MUSIC 300 OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

09472	LECT-DISC	A	2	TUWTHF	106	S M H		CARTER

MUSIC 346 WORKSHOP IN MUSIC EDUCATION.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*2 OR 4 HOURS, OR 1/2 OR 1 UNIT

09481	LECT-DISC	A	2	TUWTHF	116	1203 W NEV		R THOMAS

MUSIC 347 TEACHING OF WOODWIND INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

09499	LECT-DISC	A	1	TUWTHF	5	S M H		EDLEFSEN, KOPER, MCDOWELL, AND NANZETTA

MUSIC 348 TEACHING OF BRASS INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

09501	LECT-DISC	A	8	TUWTHF	25	S M H		GRAY, SEXTON AND ELY

COURSES FOR GRADUATES

MUSIC 400 ADVANCED INSTRUMENTATION-CHAMBER AND SYMPHONIC.
PREREQUISITE--UNDERGRADUATE INSTRUMENTATION.
1/2 OR 1 UNIT

09510	CONF	A	ARR		200	T A		KELLY

MUSIC 402 ANALYSIS IN RELATION TO PERFORMANCE AND INTERPRETATION, I.
PREREQUISITE--MUSIC 104 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

09528	LECT-DISC	A	9-11	TUWTHF	116	1203 W NEV		LEONHARD

MUSIC 406 COMPOSITION.
1/2 TO 1 1/2 UNITS

09536	CONF	A	ARR		200	T A		KELLY

MUSIC 417 HISTORY OF INSTRUMENTAL MUSIC FROM 1600 TO 1750.
PREREQUISITE--MUSIC 416 OR CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

09544	LECT-DISC	A	1-3	TU TH	201	H A		HANSELL

MUSIC 430 ADVANCED ORCHESTRA CONDUCTING AND LITERATURE.
PREREQUISITE--PREVIOUS CONDUCTING EXPERIENCE.
1 UNIT

09552	LECT-DISC	A	8	TUWTHF	104	1203 W NEV		BERGETHON

MUSIC 431 ADVANCED BAND CONDUCTING AND LITERATURE.
PREREQUISITE--BACHELORS DEGREE WITH MAJOR WORK OR EXPERIENCE IN BAND AND/OR ORCHESTRA, CONSENT OF INSTRUCTOR.
1 UNIT

09561	LECT-DISC	A	3-5	TUWTHF	8	S A		COLWELL

MUSIC 432 ADVANCED CHORAL TECHNIQUES.
PREREQUISITE--GRADUATE STANDING IN MUSIC.
1 UNIT

09579	LECT-DISC	A	11-1	TUWTHF	25	S M H		DECKER

MUSIC 435 VOCAL LITERATURE.
PREREQUISITE--BACHELOR OF MUSIC OR BACHELOR OF SCIENCE IN MUSIC EDUCATION, OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

09587	LECT-DISC	A	1-3	W F	215	S M H		KELLOGG

MUSIC 438 WIND INSTRUMENT LITERATURE.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT
*SECTION A--WOODWIND AND SECTION B--BRASS.

09595	LAB-DISC	*B	1-3	MTUWTH	141	BAND		KISINGER

MUSIC 442 THE GENERAL MUSIC PROGRAM IN SECONDARY SCHOOLS.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION.
1/2 OR 1 UNIT

09608	LECT-DISC	A	2-4	TUWTHF	104	1203 W NEV		KIRK

MUSIC 443 ADMINISTRATION AND SUPERVISION OF MUSIC EDUCATION.
PREREQUISITE--GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION.
1/2 OR 1 UNIT

09616	LECT-DISC	A	3	TUWTHF	116	1203 W NEV		R THOMAS

MUSIC 445 MUSIC IN HIGHER EDUCATION.
PREREQUISITE--GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION.
1/2 OR 1 UNIT

09624	LECT-DISC	A	11	TUWTHF	104	1203 W NEV		BERGETHON

APPLIED MUSIC

NOTE--STUDENTS IN MUSIC CURRICULA RECEIVE THREE OR FOUR HOURS FOR THEIR MAJOR OR PRINCIPAL SUBJECT.

AS A PART OF THE REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE, SENIOR STUDENTS MUST PRESENT A PUBLIC RECITAL WHICH MEETS WITH SCHOOL OF MUSIC FACULTY APPROVAL AND CONFORMS WITH DEPARTMENTAL REQUIREMENTS.

MUSIC STUDENTS RECEIVE TWO HOURS CREDIT FOR THEIR MINOR OR SECONDARY SUBJECT.

STUDENTS FROM OTHER COLLEGES RECEIVE TWO HOURS CREDIT FOR WORK IN APPLIED MUSIC IF IN ACCORDANCE WITH THE REGULATIONS OF THEIR COLLEGE.
PASSING OF A PERFORMING EXAMINATION IS REQUIRED AS A PREREQUISITE TO THE INITIAL REGISTRATION IN ANY APPLIED MUSIC COURSE.

APPLIED MUSIC COURSES FOR UNDERGRADUATES

MUSIC 180 PIANO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09632	CONF	A	ARR	206	S M H	STRAVINSKY
09641	CONF	B	ARR	209	S M H	KARP
09659	CONF	C	ARR			
09667	CONF	D	ARR			

MUSIC 181 VOICE.
2 OR 3 HOURS, SUMMER--1 OR 2 HOURS

09675	CONF	A	ARR	211	S M H	FOOTE
09683	CONF	B	ARR	203	S M H	BAILEY
09691	CONF	C	ARR	215	S M H	KELLOGG
09704	CONF	D	ARR	210	S H	G WILSON
09712	CONF	E	ARR			

MUSIC 182 ORGAN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS.

09721	CONF	A	ARR	200	S M H	HAMILTON

MUSIC 183 VIOLIN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09739	CONF	A	ARR	205	S A	FARMER

MUSIC 184 VIOLA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09747	CONF	A	ARR	205	S A	FARMER

MUSIC 185 CELLO.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09755	CONF	A	ARR	201	S A	SWENSON

MUSIC 186 STRING BASS.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09763	CONF	A	ARR	9	S M H	KROLICK

MUSIC 187 FLUTE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09771	CONF	A	ARR	10	S M H	NANZETTA

MUSIC 188 CLARINET.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09780	CONF	A	ARR	11	S M H	MCDOWELL

MUSIC 189 OBOE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09798	CONF	A	ARR	2	S M H	EDLEFSEN

MUSIC 190 BASSOON.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09801	CONF	A	ARR	203	S H		KOPER

MUSIC 191 CORNET AND TRUMPET.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09819	CONF	A	ARR	14	S M H		SEXTON

MUSIC 192 FRENCH HORN.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09827	CONF	A	ARR	4	S M H		ELY

MUSIC 193 TROMBONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09835	CONF	A	ARR	8	S M H		GRAY

MUSIC 194 BARITONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09843	CONF	A	ARR	8	S M H		GRAY

MUSIC 195 TUBA.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09851	CONF	A	ARR	8	S M H		GRAY

MUSIC 196 PERCUSSION.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09860	CONF	A	ARR	6	S M H		SOEBBING

MUSIC 198 ALTO SAXOPHONE.
2 OR 4 HOURS, SUMMER--1 OR 2 HOURS

09878	CONF	A	ARR	12	S M H		COGGINS

APPLIED MUSIC COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PREREQUISITE--FOR STUDENTS IN THE BACHELOR OF MUSIC CURRICULUM, JUNIOR STANDING IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN MUSIC EDUCATION, COMPLETION OF THE CURRICULAR REQUIREMENT IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN OTHER COLLEGES OF THE UNIVERSITY, COMPLETION OF FOUR SEMESTERS IN THE COMPARABLE APPLIED MUSIC COURSE AT THE 100 LEVEL. QUALIFYING EXAM FOR TRANSFER STUDENTS.

MUSIC 380 PIANO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09886	CONF	A	ARR	206	S M H		STRAVINSKY
09894	CONF	B	ARR	209	S M H		KARP

MUSIC 381 VOICE.
2 OR 3 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09907	CONF	A	ARR	211	S M H		FOOTE
09915	CONF	B	ARR	203	S M H		BAILEY
09923	CONF	C	ARR	215	S M H		KELLOGG
09931	CONF	D	ARR	210	S M H		G WILSON

MUSIC 382 ORGAN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09940	CONF	A	ARR	200	S M H		HAMILTON

MUSIC 383 VIOLIN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09958	CONF	A	ARR	202	S A		ROLLAND

MUSIC 384 VIOLA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09966	CONF	A	ARR	205	S A		FARMER

MUSIC 385 CELLO.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09974	CONF	A	ARR	201	S A		SWENSEN

MUSIC 386 STRING BASS.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09982	CONF	A	ARR	9	S	M	H	KROLICK

MUSIC 387 FLUTE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

09991	CONF	A	ARR	10	S	M	H	NANZETTA

MUSIC 388 CLARINET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10008	CONF	A	ARR	11	S	M	H	MCDOWELL

MUSIC 389 OBOE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10016	CONF	A	ARR	2	S	M	H	EDLEFSEN

MUSIC 390 BASSOON.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10024	CONF	A	ARR	203	S		H	KOPER

MUSIC 391 CORNET AND TRUMPET.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10032	CONF	A	ARR	14	S	M	H	SEXTON

MUSIC 392 FRENCH HORN.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10041	CONF	A	ARR	4	S	M	H	ELY

MUSIC 393 TROMBONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10059	CONF	A	ARR	8	S	M	H	GRAY

MUSIC 394 BARITONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10067	CONF	A	ARR	8	S	M	H	GRAY

MUSIC 395 TUBA.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10075	CONF	A	ARR	8	S	M	H	GRAY

MUSIC 396 PERCUSSION.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10083	CONF	A	ARR	6	S	M	H	SOEBBING

MUSIC 398 SAXOPHONE.
2 OR 4 HOURS, 1/2 OR 1 UNIT, SUMMER--1 OR 2 HOURS, 1/4 OR 1/2 UNIT.

10091	CONF	A	ARR	12	S	M	H	COGGINS

APPLIED MUSIC COURSES FOR GRADUATES

MUSIC 480 PIANO.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10104	CONF	A	ARR	206	S	M	H	STRAVINSKY
10112	CONF	B	ARR	209	S	M	H	KARP

MUSIC 481 VOICE.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10121	CONF	A	ARR	211	S	M	H	FOOTE
10139	CONF	B	ARR	203	S	M	H	BAILEY
10147	CONF	C	ARR	215	S	M	H	KELLOGG
10155	CONF	D	ARR	210	S	M	H	G WILSON

MUSIC 482 ORGAN.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10163	CONF	A	ARR	200	S M H		HAMILTON

MUSIC 483 STRING INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10171	CONF	A	ARR	202	S A		ROLLAND AND STRING FACULTY

MUSIC 484 WIND INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10180	CONF	A	ARR	11	S M H		MCDOWELL AND WIND FACULTY

MUSIC 489 DOCTORAL PROJECTS.
OPEN ONLY TO STUDENTS IN THE DOCTOR OF MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 3 UNITS

10198	CONF	A	ARR	210	1203 W NEV		GOLDTHWAITE & GRAD FACULTY

MUSIC 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF ADVISOR.
0 TO 4 UNITS, SUMMER--0 TO 2 UNITS

10201	CONF	A	ARR	210	1203 W NEV		BERGETHON, GOLDTHWAITE, LEONHARD, RINGER

SUPPLEMENTARY INSTRUMENTS

NOTE--THESE COURSES ARE OPEN AS ELECTIVES TO STUDENTS FROM OTHER COLLEGES. IN COURSES INVOLVING TWO INSTRUMENTS, TWO DAYS A WEEK ARE SPENT ON EACH INSTRUMENT FOR THE ENTIRE SEMESTER. PREREQUISITE FOR ALL NON-MUSIC STUDENTS--CONSENT OF INSTRUCTOR.

COURSES FOR UNDERGRADUATES

MUSIC 170 STRING INSTRUMENTS.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
2 HOURS
*SECTION A IS FOR BEGINNERS. SECTION B IS FOR ADVANCED STUDENTS.

10219	LAB-DISC	*A	8	MTUWTHF	5	S M H		KROLICK, D MILLER

MUSIC 177 CLASS PIANO INSTRUCTION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS
*FOR NON-MUSIC STUDENTS ONLY

10227	LAB-DISC	*A	10	TUWTHF	5	P A		RUPPEL

ENSEMBLE COURSES

NOTE--ALL ENSEMBLE COURSES REQUIRE CONSENT OF INSTRUCTOR.

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 250 UNIVERSITY ORCHESTRA.
1/2 HOUR

10235	PRACT	A	730-930PM	TU		RECITAL HALL		

MUSIC 261 UNIVERSITY CHORUS.
NOTE--OPEN TO STUDENTS, FACULTY AND TOWNSPEOPLE.
1/2 HOUR

10243	PRACT	A	12	TUWTHF	25	S M H		DECKER

MUSIC 265 OPERA WORKSHOP AND ENSEMBLE.
1/2 HOUR

10251	PRACT	A	3-6	TU TH	5	S M H		ZIRNER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 350 ADVANCED ENSEMBLE MUSIC.
PREREQUISITE--REGISTRATION IN APPLIED MUSIC AT THE 300 LEVEL AND CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT, SUMMER--1 HOUR OR 1/4 UNIT
*SECTION A IS FOR INSTRUMENTAL, SECTION B FOR OPERATIC, SECTION C FOR COLLEGIUM.

10260	PRACT	*A	ARR		201	S A		SWENSON
10278	CONF	*B	3-5	W	5	S M H		ZIRNER

MUSIC LITERATURE COURSES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 320 PROSEMINAR.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 8 HOURS OR 2 UNITS.
*2 OR 4 HOURS, OR 1/2 OR 1 UNIT
REHEARSAL HOURS TO BE ARRANGED.
*WORKSHOP IN ANALYSIS AND PERFORMANCE OF CONTEMPORARY LITERATURE.

10286	LECT-DISC	A	9-11	M F	201	H A		BARTHA
10294	CONF	B	ARR		210	1203 W NEV		GOLDTHWAITE & GRAD. FACULTY
10307	LAB-DISC	*C	ARR		206	T A		MARTIRANO

COURSES FOR GRADUATES

MUSIC 420 SEMINAR IN MUSIC LITERATURE.
REQUIRED OF ALL STUDENTS ENROLLED IN THE DOCTORAL MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

10315	LECT-DISC	A	3-5	M W	201	H A		GOLDTHWAITE

MUSIC 426 BEETHOVEN, I.
1/2 OR 1 UNIT

10323	LECT-DISC	A	10	TUWTHF	101	H A		RINGER

NUCLEAR ENGINEERING

DEPARTMENT OFFICE 214 N E L

COURSES FOR GRADUATES

NUC E 451 REACTOR LABORATORY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

10331	LECT-DISC		11	M W F	203 N E L	
10340	LAB	A	1-5	M W	NUC REACTOR LAB	
10358	LAB	B	1-5	TU TH	NUC REACTOR LAB	

NUC E 454 NUCLEAR ENGINEERING LABORATORY INVESTIGATIONS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 1/2 UNITS

10366	CONF		ARR			STAFF

NUC E 460 REACTOR KINETICS.
PREREQUISITE--NUC.E. 401 AND 455 OR CONSENT OF INSTRUCTOR.
1 UNIT

10374	LECT-DISC		9	MTUWTHF	203 N E L	
	LAB		1-5	F	263 E E B	

NUC E 490 SPECIAL TOPICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

10382	LECT-DISC		1-3	M W F	203 N E L	STAFF

NUC E 495 NUCLEAR ENGINEERING PROBLEMS.
PREREQUISITE--AT LEAST THREE UNITS OF GRADUATE WORK AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

10391	CONF		ARR			STAFF

NUC E 497 SEMINAR IN NUCLEAR SCIENCE AND ENGINEERING.
0 OR 1/4 UNIT

10403	LECT-DISC		11	TH	203 N E L	STAFF

NUC E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

10411	CONF		ARR			STAFF

PHILOSOPHY

DEPARTMENT OFFICE 105 G H

MAJOR--TWENTY HOURS FROM ANY COURSES OFFERED BY THE DEPARTMENT, INCLUDING PHIL. 102, 303, 306, 321, AND ONE ADDITIONAL 300 COURSE IN PHILOSOPHY.

MINORS--TWENTY COURSE HOURS FROM THE SUBJECTS RECOGNIZED AS MAJORS BY THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR FROM ANY APPROVED LAS INTERDEPARTMENTAL CURRICULUM, OR FROM EDUCATION OR LIBRARY SCIENCE OR LINGUISTICS. RHETORIC 101, 102, 107, 108, FIRST-YEAR MODERN FOREIGN LANGUAGE COURSES, AND COURSES IN APPLIED MUSIC ARE EXCLUDED. IF TWO DEPARTMENTS OR CURRICULA ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

COURSES FOR UNDERGRADUATES

FRESHMAN JAMES SCHOLARS ARE AUTOMATICALLY PERMITTED TO TAKE ANY 100 LEVEL PHILOSOPHY COURSE.

PHIL 101 INTRODUCTION TO PHILOSOPHY.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

10420	LECT-DISC	B	9-11	M	W	F	321	G	H
10438	LECT-DISC	F	2-4	M	W	F	321	G	H

PHIL 102 LOGIC.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

10446	LECT-DISC	C	10-12	M	W	F	311	G	H
10454	LECT-DISC	E	1-3	M	W	F	311	G	H

PHIL 105 MORAL IDEAS AND PRACTICE.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
*CREDIT IS NOT GIVEN FOR BOTH PHIL. 105 AND 103.
*2 HOURS

10462	LECT-DISC	B	840-10	M	W	F	307	G	H
10471	LECT-DISC	D	1240-2	M	W	F	321	G	H

COURSES FOR ADVANCED UNDERGRADUATES

PHIL 291 READING COURSE.
COURSE MAY BE REPEATED TO A TOTAL OF 4 HOURS OF CREDIT.
PREREQUISITE--JUNIOR OR SENIOR WITH A GENERAL GRADE POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

10489	CONF	ARR

PHIL 292 THESIS.
COURSE MAY BE REPEATED TO A TOTAL OF 4 HOURS OF CREDIT.
PREREQUISITE--SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

10497	CONF	ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOPHOMORE JAMES SCHOLARS WHO HAVE HAD NO PHILOSOPHY COURSES ARE PERMITTED TO TAKE PHIL. 303, 306, 307, AND 308. THOSE WHO HAVE HAD A PHILOSOPHY COURSE MAY TAKE ANY 300-LEVEL PHILOSOPHY COURSE.

PHIL 307 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS, OR 1/2 UNIT

10500	LECT-DISC		10	M	W	F	317	G	H

PHIL 308 HISTORY OF MODERN PHILOSOPHY.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS, OR 1/2 UNIT

10518	LECT-DISC		11	M	W	F	321	G	H

PHIL 311 PHILOSOPHIC IDEAS OF THE NINETEENTH AND TWENTIETH CENTURIES.
3 HOURS, OR 3/4 OR 1 UNIT

10526	LECT-DISC		8-10	M	W	F	311	G	H

PHIL 326 METAPHYSICS.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT

10534	LECT-DISC		2-4	M	W	F	113	G	H

PHIL 483 INDIVIDUAL TOPICS.
*NOT MORE THAN 1 UNIT MAY BE COUNTED TOWARD M.A. DEGREE AND NOT MORE THAN 2 TOWARD PH. D.
*1/2 OR 1 UNIT, SUMMER--1/2 TO 2 UNITS
10542 CONF ARR

PHIL 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
10551 CONF ARR

PHYSICAL EDUCATION FOR MEN

MEN ENTERING THE UNIVERSITY WITH LESS THAN SIXTY SEMESTER HOURS OF CREDIT--EXCEPT VETERANS WHO RECEIVE CREDIT BECAUSE OF MILITARY SERVICE, BUT WHO MAY ELECT TO TAKE PHYSICAL EDUCATION--ARE REQUIRED TO OBTAIN CREDIT FOR FOUR SEMESTERS OF PHYSICAL EDUCATION, INCLUDING THE AMOUNT TRANSFERRED. ONE OF THE COURSES MUST BE PEM 100, WHICH WILL BE TAKEN IN THE FRESHMAN YEAR. CREDIT MAY BE OBTAINED BY PASSING COURSES LISTED BELOW OR BY PASSING PROFICIENCY EXAMINATIONS WHICH ARE OFFERED AT TIMES SPECIFIED BY DEPARTMENT. PERMITS FOR TAKING PROFICIENCY EXAMINATIONS MUST BE SECURED IN ROOM 201 MENS OLD GYMNASIUM NOT LATER THAN 48 HOURS PRECEDING EACH EXAMINATION. STUDENTS ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS IN COURSES IN WHICH THEY ARE CURRENTLY REGISTERED. STUDENTS ENROLLED IN PRESCRIBED EXERCISE ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS WITHOUT SPECIAL WRITTEN PERMISSION FROM THE COORDINATOR OF PRESCRIBED EXERCISE.

OFFICE FOR BASIC INSTRUCTION COURSES--201 MENS OLD GYMNASIUM.

OFFICE FOR PROFESSIONAL COURSES--119 HUFF GYMNASIUM.

BASIC INSTRUCTION COURSES FOR UNDERGRADUATES

NOTE-- MOST PEM BASIC INSTRUCTION COURSES HAVE BEEN ARRANGED IN SEQUENCES TO FACILITATE REGISTRATION OF ADVANCE- ENROLLED STUDENTS IN BASIC INSTRUCTION COURSES. THESE SEQUENCES ARE AS FOLLOWS-

SEQUENCE 1 - PEM 118, 120
SEQUENCE 2 - PEM 124, 127, 128, 129, 130
SEQUENCE 3 - PEM 115, 123, 134, 135, 137, 145
SEQUENCE 4 - PEM 133, 136, 142, 143
SEQUENCE 5 - PEM 112, 132, 138

STUDENTS REQUESTING A COURSE IN ONE OF THE ABOVE SEQUENCES WILL BE SCHEDULED IN ONE OF THE OTHER COURSES IN THAT SEQUENCE IF SECTIONS OF THE REQUESTED COURSE ARE CLOSED.

P E M 101 PRESCRIBED EXERCISE.
PREREQUISITE--ASSIGNMENT BY THE HEALTH SERVICE.
STUDENTS MAY ACCUMULATE 3 HOURS.
1 HOUR
10569 LAB 2 M W F 106 MOG ANNEX

P E M 135 TENNIS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
10577 LAB 3-5 M W GREGORY CTS
NOTE--FIRST CLASS MEETING WILL BE HELD IN NORTH BALCONY HUFF GYM.

P E M 136 BADMINTON.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
10585 LAB 1-3 TU TH 100 H G

P E M 137 BOWLING.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
10593 LAB 1-3 M W 60 IU ALLEYS

P E M 138 GOLF.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
10606 LAB 8-10 TU TH FLD C H G
NOTE--FIRST CLASS MEETING WILL BE HELD IN WEST BALCONY, HUFF GYM.

P E M 140 CANOEING AND SMALL CRAFT OPERATION.
PREREQUISITE--ABILITY TO JUMP OR DIVE INTO DEEP WATER
WHILE CLOTHED AND MAINTAIN A SURVIVAL POSITION FOR TEN MINUTES.
1 HOUR
REGISTRATION IS LIMITED TO STUDENTS WITH FREE PERIOD
PRECEDING THE COURSE HOUR.
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.
10614 LAB 3-5 TU TH CRYSTAL LAKE
NOTE--FIRST CLASS MEETING WILL BE HELD IN 202 MENS OLD GYM.

P E M 142 BALLROOM DANCE.
1 HOUR
10622 LAB 7-9PM TU TH 310 W GYM

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E M 213 ADVANCED FOOTBALL.
PREREQUISITE--P.E.M. 152.
1 HOUR
FIRST FOUR WEEKS OF SUMMER SESSION.
10631 LECT-DISC 7 MTUWTH 209 H G STAUBER

P E M 214 ADVANCED BASKETBALL.
PREREQUISITE--P.E.M. 151.
1 HOUR
SECOND FOUR WEEKS OF SUMMER SESSION.
10649 LECT-DISC 7 MTUWTH 209 H G COMBES

P E M 217 THEORY OF COACHING.
PREREQUISITE--P.E.M. 213 AND P.E.M. 214, OR CONSENT OF INSTRUCTOR.
2 HOURS
10657 LECT-DISC 8 MTUWTH 211 H G FLETCHER

PHYSICAL EDUCATION

DEPARTMENT OFFICE 121 HUFF GYM

COURSES FOR GRADUATES

P E 401 ADMINISTRATION OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--P.E.M. OR P.E.W. 204 OR EQUIVALENT.
1 UNIT
10665 LECT-DISC 830-10 TU TH 133 ARMORY ZEIGLER
830-10 W 300 ARMORY

P E 402 HISTORY OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--P.E.M. OR P.E.W. 209 OR EQUIVALENT.
1 UNIT
10673 LECT-DISC 8 MTUWTH 207A H G FLATH

P E 406 PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--PHIL. 101 AND HP. ED. 305.
1 UNIT
10681 LECT-DISC 10 MTUWTH 207A H G VANDERZWAAG

P E 407 SPORT PSYCHOLOGY.
PREREQUISITE--PSYCH. 100, ED. PSY. 211, CONSENT OF INSTRUCTOR.
1 UNIT
*TWO ADDITIONAL HOURS 2-4 MONDAY AND TWO ADDITIONAL HOURS ARRANGED.

10690	LECT-DISC	*11	MTUWTH	207A	H G	HUBBARD

P E 408 PRINCIPLES OF KINESIOTHERAPY.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, AND PHYSIOLOGY OF EXERCISE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*THREE ADDITIONAL HOURS IN EXERCISE THERAPY CLINIC 3-6 MWF.

10702	LECT-DISC	*8	MTUWTH	106	MOG ANNEX	SHELTON

P E 451 SCIENTIFIC FOUNDATIONS OF PHYSICAL FITNESS.
PREREQUISITE--UNDERGRADUATE ANATOMY AND PHYSIOLOGY, TESTS AND MEASUREMENTS.
1 UNIT
*FOUR ADDITIONAL HOURS 2-4 MONDAY & WEDNESDAY.

10711	LECT-DISC	*10	MTUWTH	209	H G	CURETON AND ROTHERMEL

P E 452 SCIENTIFIC ANALYSIS OF PHYSICAL EDUCATION ACTIVITIES.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, ELEMENTARY PHYSICS, ALGEBRA AND TRIGONOMETRY, OR CONSENT OF INSTRUCTOR.
1 UNIT
*FOUR ADDITIONAL HOURS 2-4 TUESDAY & THURSDAY.

10729	LECT-DISC	*9	MTUWTH	209	H G	CURETON AND ROTHERMEL

P E 490 SEMINAR.
NO CREDIT
*SECTION T1 FOR STUDENTS INTERESTED PRIMARILY IN RESEARCH RELATED TO NATURAL SCIENCES.
*SECTION T2 FOR STUDENTS CONCERNED WITH RESEARCH IN HUMANITIES AND SELECTED SOCIAL SCIENCES.

10737	LECT-DISC	*T1	7-9PM	TU TH	209	H G	ROTHERMEL, CURETON, STAFF
10745	LECT-DISC	*T2	4-6	TU	207	H G	TREKELL,
		*T2	7-9PM	TH	209	H G	ZEIGLER, STAFF

P E 493 SPECIAL PROJECTS.
1/2 OR 1 UNIT
*SECTION 1 IS A COMPARATIVE PHYSICAL EDUCATION AND SPORT PRACTICUM MEETING FROM JUNE 21 TO JUNE 30--CREDIT 1/2 UNIT.
*SECTION 2 IS A PROFESSIONAL PREPARATION PRACTICUM MEETING FROM JULY 5 TO JULY 14--CREDIT 1/2 UNIT.

10753	LECT-DISC	*1	130-330	MTUWTH	133	ARMORY	HOWELL
10761	LECT-DISC	*2	130-330	MTUWTH	133	ARMORY	ESSLINGER

P E 495 TECHNIQUES OF RESEARCH IN HEALTH, PHYSICAL EDUCATION, AND RECREATION.
1 UNIT
*FOUR HOURS IN LABORATORY 7-9 PM MONDAY & WEDNESDAY IN 302 HUFF GYM.

10770	CONF	*11	MTUWTH	209	H G	HUBBARD, TREKELL, AND ROTHERMEL

P E 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

10788	CONF	ARR	STAFF

PHYSICAL EDUCATION FOR WOMEN

DEPARTMENT OFFICE 117 W GYM

FRESHMEN AND SOPHOMORES--OF THE FOUR SEMESTERS REQUIRED IN PHYSICAL EDUCATION, THE DEPARTMENT REQUIRES ONE SEMESTER OF BASIC MOVEMENT-PEW 100, WHICH WILL BE TAKEN IN THE FRESHMAN YEAR AND RECOMMENDS ONE SEMESTER OF SWIMMING--P E W 110 OR 111. ANY COURSE NOT PREVIOUSLY TAKEN MAY BE TAKEN IN THE TWO REMAINING SEMESTERS.

BASIC INSTRUCTION COURSES FOR UNDERGRADUATES

NOTE--MOST PEW BASIC INSTRUCTION COURSES HAVE BEEN ARRANGED IN SEQUENCES IN ORDER TO BETTER INSURE THE ADVANCE- ENROLLEES A COURSE OF THEIR CHOICE. THESE SEQUENCES ARE AS FOLLOWS-

SEQUENCE 1 - PEW 107, 111, 122, 124, 136
SEQUENCE 2 - PEW 104, 110, 121, 123, 132, 135
SEQUENCE 3 - PEW 120, 130, 133, 138, 145

STUDENTS REQUESTING A COURSE IN ONE OF THE ABOVE SEQUENCES WILL BE SCHEDULED IN ONE OF THE OTHER COURSES IN THAT SEQUENCE IF SECTIONS OF THE REQUESTED COURSE ARE CLOSED.

P E W 110 ELEMENTARY SWIMMING.
1 HOUR

10796	LAB	E	1	MTUWTH	116	E B POOL

P E W 111 SUB-INTERMEDIATE SWIMMING.
1 HOUR

10809	LAB	F	2	MTUWTH	116	E B POOL
10817	LAB	G	3	MTUWTH	116	E B POOL

P E W 112 INTERMEDIATE SWIMMING.
1 HOUR

10825	LAB	F	2	MTUWTH	116	E B POOL
10833	LAB	G	3	MTUWTH	116	E B POOL

P E W 131 GOLF.
1 HOUR

10841	LAB	D	11-1	M W	11	W GYM
10850	LAB	P	11-1	TU TH	11	W GYM

P E W 136 TENNIS.
1 HOUR

10868	LAB	A	8	MTUWTH	310	W GYM
10876	LAB	X	630-8PM	TU TH	311	W GYM

P E W 142 BALLROOM DANCE.
1 HOUR

10884	LAB	L	7-9PM	TU TH	310	W GYM

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E W 220 PHYSICAL EDUCATION FOR THE CLASSROOM TEACHER.
PREREQUISITE--JUNIOR STANDING, NON-PHYSICAL EDUCATION MAJOR.
2 HOURS

10892	LAB-DISC	A	8	MTUWTHF	311	W GYM

DEPARTMENT OFFICE 211 P B

ENGINEERING PHYSICS CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.CURRICULUM IN PHYSICS--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.GENERAL CURRICULUM MAJOR--TWENTY HOURS IN PHYSICS, INCLUDING PHYSICS 321, 341, AND 342, AND EXCLUDING COURSES WITH NUMBERS LOWER THAN 270.

L.A.S.GENERAL CURRICULUM MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH NOT LESS THAN EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, CHEMISTRY, EDUCATION, GEOLOGY, MATHEMATICS, ZOOLOGY OR ANY ONE BRANCH OF ENGINEERING.

PHYSICS 101 AND 102 ARE RECOMMENDED TO PREMEDICAL, PREDENTAL, ARCHITECTURE, AND OTHER STUDENTS NOT SPECIALIZING IN PHYSICS, MATHEMATICS, CHEMISTRY OR ENGINEERING.

THE CALCULUS PREREQUISITE FOR CERTAIN COURSES MAY BE SATISFIED EITHER BY MATH. 132 AND 142, OR MATH. 133 AND 143.

COURSES FOR UNDERGRADUATES

PHYCS 106 GENERAL PHYSICS--MECHANICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--MATH. 122, 123--CREDIT OR REGISTRATION IN MATH, 132 OR 133.
4 HOURS

10905	LECT		10	MTUWTH	141	P B
10913	QUIZ	A	1-3	TU TH	147	P B
	LAB	A	1-3	M W	232	P B
10921	QUIZ	B	3-5	TU TH	147	P B
	LAB	B	3-5	M W	232	P B

PHYCS 107 GENERAL PHYSICS--HEAT, ELECTRICITY, AND MAGNETISM.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 106, CREDIT OR REGISTRATION IN MATH. 142 OR 143.
4 HOURS

10930	LECT	11	MTUWTH	151	P B
	QUIZ	2-4	TU TH	137	P B
	LAB	2-4	M W	234	P B

PHYCS 108 GENERAL PHYSICS--WAVE MOTION, SOUND, LIGHT AND MODERN PHYSICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN MATH 142 OR 143
4 HOURS

10948	LECT	8	TUWTHF	151	P B
	QUIZ	1-3	TU TH	143	P B
	LAB	1-3	W F	236	P B

COURSES FOR GRADUATES

PHYCS 497 INDIVIDUAL STUDY.
1/2 OR 1 UNIT

10956	CONF	ARR		STAFF

PHYCS 498 SEMINAR.
1/2 OR 1 UNIT
1/2 UNIT. GROUP THEORY AND APPLICATIONS.

10964	LECT	830-10	TU TH	137	P B	FOWLER

PHYCS 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

10972	CONF	ARR	STAFF

PHYSIOLOGY

DEPARTMENT OFFICE 524 BUR HALL

MAJOR--THE MAJOR CONSISTS OF TWENTY HOURS IN ANIMAL PHYSIOLOGY OR CLOSELY RELATED SUBJECTS LISTED IN THE LAST SENTENCE BELOW, NOT INCLUDING ELEMENTARY COURSES, AND INCLUDING PHYSL. 301 AND PHYSL 302. BECAUSE PHYSIOLOGY REQUIRES AN UNDERSTANDING OF PHYSICAL AND BIOLOGICAL SCIENCE, THE STUDENTS PROGRAM MUST INCLUDE A YEAR OF GENERAL BIOLOGY, INCLUDING BOTH ANIMAL AND PLANT BIOLOGY, A SEMESTER OF GENETICS, MATHEMATICS THROUGH ELEMENTARY CALCULUS, TWO SEMESTERS OF PHYSICS, AND FOUR SEMESTERS OF CHEMISTRY INCLUDING GENERAL, INORGANIC, ORGANIC AND QUANTITATIVE CHEMISTRY. MICROBIOLOGY, EMBRYOLOGY, HISTOLOGY, PHYSICAL CHEMISTRY AND BIOCHEMISTRY ARE RECOMMENDED STRONGLY. WITH THE APPROVAL OF THE ADVISER, UPPER DIVISION COURSES IN GENETICS, BIOCHEMISTRY, BIOPHYSICS, AND PLANT PHYSIOLOGY MAY BE COUNTED TOWARD THE MAJOR.

MINOR--TWENTY HOURS MAY BE CHOSEN FROM PHYSICS, CHEMISTRY, MICROBIOLOGY OR ZOOLOGY, PROVIDED AT LEAST 8 SEMESTER HOURS ARE OFFERED IN THE LESSER, IF TWO MINORS ARE CHOSEN.

HONORS--STUDENTS WORKING TOWARD DEPARTMENTAL DISTINCTION MUST ENROLL IN PHYSIOLOGY 290 READING COURSE, WORK WITH AN ADVISER FOR AT LEAST TWO SEMESTERS, AND TAKE A GENERAL EXAMINATION IN THE LAST SEMESTER OF THE SENIOR YEAR.

COURSES FOR UNDERGRADUATES

PHYSL 103 INTRODUCTION TO HUMAN PHYSIOLOGY.
*CREDIT IS NOT GIVEN IN PHYSL. 103 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

10981	LECT		1	MTUWTHF	140	BUR HALL	STAFF
10999	LAB-DISC	1	2-4	M W	434	BUR HALL	
		1	2-4	TU TH	436	BUR HALL	
11003	LAB-DISC	2	2-4	TU TH	434	BUR HALL	
		2	2-4	M W	436	BUR HALL	
11011	LAB-DISC	3	2-4	M W	422	BUR HALL	
		3	2-4	TU TH	444	BUR HALL	
11020	LAB-DISC	4	2-4	TU TH	422	BUR HALL	
		4	2-4	M W	444	BUR HALL	

COURSES FOR ADVANCED UNDERGRADUATES

PHYSL 290 READING COURSE.
PREREQUISITE--A COURSE IN PHYSIOLOGY, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS
NOTE--THIS COURSE IS NOT LIMITED TO HONORS STUDENTS.

11038	CONF	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PHYSL 301 GENERAL PHYSIOLOGY.
SAME AS ZOOL. 301.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS, AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

11046	LECT		8	MTUWTHF	140	BUR HALL	ANDERSON
11054	LAB	1	9-12	MTUW	523	BUR HALL	
11062	LAB	2	2-5	MTUW	523	BUR HALL	

COURSES FOR GRADUATES

PHYSL 491 INDIVIDUAL TOPICS.
PREREQUISITE--APPROVAL OF DEPARTMENT.
1/2 TO 2 UNITS
11071 CONF ARR STAFF

PHYSL 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
11089 CONF ARR STAFF

PLANT PATHOLOGY

DEPARTMENT OFFICE 218 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PL PA 300 SPECIAL PROBLEMS.
UNDERGRADUATE PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
*MAXIMUM CREDIT EIGHT HOURS OR TWO UNITS.
*2 TO 4 HOURS, OR 1/4 TO 1 UNIT
BEVER, BLACK, BRITTON, CARTER, CHAMBERLAIN, GERDEMANN GOTTLIEB, HOOKER LINN, PAXTON, POWELL, SHAW, SHURTLEFF, TAYLOR, THORNBERRY
11097 CONF ARR

COURSES FOR GRADUATES

PL PA 499 THESIS RESEARCH.
PREREQUISITE--PL.PA. 301 AND 302 OR EQUIVALENT.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
BEVER, BLACK, BRITTON CARTER, CHAMBERLAIN, GERDEMANN, GOTTLIEB, HOOKER, LINN, POWELL, SHAW, SHURTLEFF, TAYLOR THORNBERRY.
11100 CONF ARR

POLITICAL SCIENCE

DEPARTMENT OFFICE 325 L H

MAJOR--TWENTY HOURS FROM COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE. A MAJOR MAY INCLUDE THREE SEMESTER HOURS FROM THE FOLLOWING COURSES--ECONOMICS 170, 171--STATISTICS--, ECONOMICS 214--PUBLIC FINANCE--, HISTORY 345, 346, 369, 370--CONSTITUTIONAL HISTORY--, MATHEMATICS 161--STATISTICS--, PSYCHOLOGY 135--STATISTICS AND SOCIOLOGY 185--STATISTICS--. NO STUDENT ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1961, MAY OFFER MORE THAN EIGHT HOURS OF 100 LEVEL COURSES AS PART OF A POLITICAL SCIENCE MAJOR.

MINOR--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, EDUCATION, FINANCE, GEOGRAPHY, HISTORY, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY, AND SPEECH. ONE OF THE CURRICULA IN LATIN-AMERICA STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR.

STUDENTS ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1963, MAY NOT OFFER MORE THAN EIGHT HOURS OF 100-LEVEL COURSES AS PART OF A MINOR, EXCEPT THAT MATH. 123 OR HIGHER-NUMBERED MATHEMATICS COURSES ARE NOT COUNTED IN THIS LIMITATION.

POLITICAL SCIENCE 150 AND 151 GIVE A GENERAL SURVEY OF NATIONAL, STATE AND LOCAL GOVERNMENT IN THE UNITED STATES. POLITICAL SCIENCE 191 AND 192 PRESENT A SURVEY OF THE BASIC CONCEPTS AND METHODS OF POLITICAL SCIENCE AND OF SIGNIFICANT CURRENT GOVERNMENTAL AND POLITICAL PROBLEMS AND POLICIES. UNDERGRADUATES BEGINNING THE STUDY OF POLITICAL SCIENCE ARE ADVISED TO TAKE, FIRST, EITHER POL. S. 150 OR 191. STUDENTS PLANNING TO DO ADVANCED WORK SHOULD, DURING THE SOPHOMORE YEAR, TAKE EITHER 150 OR 191 AND FOLLOW IT WITH SUCH OTHER COURSES AS COMPLETE ONE OF THE FOLLOWING COMBINATIONS--150 AND 151, 150 AND 192, 150 AND 184, 184 AND 191, OR 191 AND 192.

COURSES FOR UNDERGRADUATES

POL S 150 AMERICAN GOVERNMENT--ORGANIZATION AND POWERS.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH POL. S. 150 AND 191.
*3 HOURS

11118	LECT-DISC	A	730-9	TUWTHF	192	L	H	GARVEY
11126	LECT-DISC	D	11	MTUWTHF	192	L	H	JONES
		D	12	TU	192	L	H	

COURSES FOR ADVANCED UNDERGRADUATES

POL S 291 THESIS AND HONORS COURSE.
PREREQUISITE--OPEN ONLY TO SENIORS WHOSE MAJOR IS POLITICAL SCIENCE AND WHO HAVE A GENERAL UNIVERSITY AVERAGE OF AT LEAST 4.0.
2 TO 5 HOURS

11134	CONF	&	ARR					STAFF

POL S 293 SELECTED TOPICS IN POLITICAL SCIENCE.
2 TO 4 HOURS

11142	CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

POL S 305 MUNICIPAL GOVERNMENT.
3 HOURS, OR 1/2 OR 1 UNIT

11151	LECT-DISC		11-1230	MTUWTH	113	G	H	GARVEY

POL S 361 INTRODUCTION TO PUBLIC ADMINISTRATION.
PREREQUISITE--POL. S. 150 OR 191.
3 HOURS, OR 1/2 OR 1 UNIT

11169	LECT-DISC		10	MTUWTHF	113	G	H	JONES
			1	W	113	G	H	

POL S 380 COMPARATIVE FOREIGN POLICIES.
PREREQUISITE--POL. S. 184 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

11177	LECT-DISC		9	MTUWTHF	113	G	H	YU
			1	M	113	G	H	

POL S 393 HISTORY OF POLITICAL THEORY.
3 HOURS, OR 1/2 OR 1 UNIT

11185	LECT-DISC		8	MTUWTHF	113	G	H	WILSON
			4	TU	113	G	H	

COURSES FOR GRADUATES

POL S 400 CLASSICS OF POLITICAL SCIENCE.
1 UNIT
11193 LECT-DISC 10-12 TU TH 398 L H WILSON

POL S 450 CONTEMPORARY GOVERNMENTAL PROBLEMS.
*STUDENTS MAY ACCUMULATE THREE UNITS.
*1 UNIT
11206 LECT-DISC 10-12 M W 398 L H YU

POL S 493 RESEARCH IN SELECTED TOPICS.
1/2 TO 3 UNITS
11214 CONF ARR STAFF

POL S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
11222 CONF ARR STAFF

PORTUGUESE

DEPARTMENT OFFICE 224 L H

COURSES FOR GRADUATES

PORT 491 SPECIAL TOPICS IN PORTUGUESE.
1/2 OR 1 UNIT
11231 CONF ARR STAFF

PORT 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 1/2 UNITS
11249 CONF ARR ALLEN

PSYCHOLOGY

DEPARTMENT OFFICE 309 G H

MAJOR--THREE TYPES OF MAJOR PROGRAMS ARE OFFERED--THE GENERAL MAJOR, SUITABLE FOR STUDENTS INTERESTED PRIMARILY IN GENERAL LIBERAL EDUCATION-THE APPLIED PSYCHOLOGY MAJOR, DESIGNED FOR STUDENTS INTERESTED IN VOCATIONAL PREPARATION INVOLVING A MINIMUM OF GRADUATE TRAINING-AND THE HONORS MAJOR, DESIGNED MAINLY TO PREPARE STUDENTS FOR GRADUATE TRAINING LEADING TO THE DOCTORATE IN PSYCHOLOGY.

THE GENERAL MAJOR MUST COMPLETE 20 HOURS IN PSYCHOLOGY BEYOND PSYCHOLOGY 100 OR 103. PSYCHOLOGY 135 IS REQUIRED IN THIS PROGRAM AND SHOULD BE TAKEN AS SOON AS POSSIBLE AFTER THE INTRODUCTORY COURSE.

THE APPLIED PSYCHOLOGY MAJOR CAN SPECIALIZE IN ANY ONE OF FOUR DIFFERENT OPTIONS, NAMELY, ENGINEERING PSYCHOLOGY, PERSONNEL PSYCHOLOGY, MEASUREMENT PSYCHOLOGY, AND SCHOOL PSYCHOLOGY. THE REQUIREMENTS FOR ENGINEERING PSYCHOLOGY ARE AS FOLLOWS-PSYCHOLOGY 235, 245, 356, 358, 12 HOURS SELECTED FROM PSYCHOLOGY 330, 331, 332, 390, MATHEMATICS 195, PHYSIOLOGY 304. THE REQUIREMENTS FOR PERSONNEL PSYCHOLOGY ARE AS FOLLOWS- PSYCHOLOGY 235, 245, 332, 355, 390-6 HOURS SELECTED FROM PSYCHOLOGY 250, 255, 256, 356, 357, 358,-6 HOURS SELECTED FROM ACCOUNTING 101-105, I. ADM. 201, ECONOMICS 102, 103, 300, INDUSTRIAL ENGINEERING 287, SOCIOLOGY 300,-MATHEMATICS 195. THE REQUIREMENTS FOR PSYCHOLOGICAL MEASUREMENT ARE AS FOLLOWS-PSYCHOLOGY 235, 245, 390-8 HOURS SELECTED FROM PSYCHOLOGY 330, 331, 332-MATHEMATICS 195 AND 315-6 HOURS SELECTED FROM PSYCHOLOGY 250, 255, 256, 355, EDUCATION 211, 325. THE REQUIREMENTS FOR SCHOOL PSYCHOLOGY ARE AS FOLLOWS-PSYCHOLOGY 235, 216, 250, 255, 311, 331, 338, 365, 390-EDUCATION 201, 211, 312, 316, 318, 322, AND 324.

THE HONORS MAJOR MUST COMPLETE 20 HOURS IN PSYCHOLOGY BEYOND PSYCHOLOGY 100 OR 103. PSYCHOLOGY 235 AND 8 HOURS OF WORK IN LABORATORY COURSES AT THE 300 LEVEL ARE REQUIRED IN THIS PROGRAM. HONORS MAJORS SHOULD ALSO REGISTER IN SPECIAL HONORS SECTIONS WHEN AVAILABLE. THESE MAJORS ARE ALSO URGED TO TAKE MATHEMATICS THROUGH CALCULUS, AT LEAST A FULL-YEAR LABORATORY COURSE IN ANOTHER SCIENCE, AND AT LEAST TWO YEARS OF FRENCH, GERMAN, OR RUSSIAN, WITH TWO YEARS IN EACH OF TWO DESIRABLE.

MINOR--FOR THE GENERAL MAJOR, 20 HOURS IN ANY SUBJECT MATTER ACCEPTED FOR CREDIT BY THE COLLEGE OF LIBERAL ARTS AND SCIENCES-IF TWO ARE CHOSEN THERE MUST BE A MINIMUM OF 8 HOURS IN EACH. IN ADDITION, IF FOREIGN LANGUAGE CREDIT IS OFFERED, IT MUST BE BEYOND THAT REQUIRED BY THE COLLEGE FOR GRADUATION.

FOR THE APPLIED PSYCHOLOGY MAJOR, THE MINOR MUST BE SELECTED IN ACCORDANCE WITH THE MAJOR OPTION. FOR ENGINEERING PSYCHOLOGY, A MINOR OR MINORS OF 20 HOURS SELECTED FROM MATHEMATICS, ENGINEERING, PHYSICS, AND PHYSIOLOGY. FOR PERSONNEL PSYCHOLOGY, A MINOR OR MINORS OF 20 HOURS SELECTED FROM MATHEMATICS, ANTHROPOLOGY, ECONOMICS, POLITICAL SCIENCE, AND SOCIOLOGY. FOR PSYCHOLOGICAL MEASUREMENT, A MINOR OF 20 HOURS IN MATHEMATICS. FOR SCHOOL PSYCHOLOGY, A MINOR OF 20 HOURS IN EDUCATION.

FOR THE HONORS MAJOR, 20 HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, PROVIDING THAT IF TWO ARE CHOSEN, THERE MUST BE A MINIMUM OF 8 HOURS IN EACH--ANTHROPOLOGY, ANY BIOLOGICAL SCIENCE, CHEMISTRY, ECONOMICS, EDUCATION, ENGINEERING, LINGUISTICS, MATHEMATICS, PHYSICS, POLITICAL SCIENCE, AND SOCIOLOGY.

DEPARTMENTAL DISTINCTION--THE MINIMUM REQUIREMENTS FOR GRADUATION WITH DEPARTMENTAL DISTINCTION IN PSYCHOLOGY ARE AS FOLLOWS--ELIGIBILITY FOR COLLEGE HONORS, SATISFACTORY COMPLETION OF THE COURSES REQUIRED IN THE HONORS MAJOR PROGRAM, AND FOUR HOURS OF CREDIT IN PSYCHOLOGY 291-292, INCLUDING AN ACCEPTABLE THESIS.

COURSES FOR UNDERGRADUATES

PSYCH 100 INTRODUCTION TO PSYCHOLOGY.
NOT OPEN TO STUDENTS ELECTING PSYCH. 103 OR D.G.S. 171.
REQUIRES FIVE HOURS OF PARTICIPATION IN LABORATORY EXPERIMENTS
4 HOURS
*STUDENTS REGISTERED IN LECTURE A MUST ELECT AN A QUIZ SECTION.
STUDENTS REGISTERED IN LECTURE B MUST ELECT A B QUIZ SECTION.

11257	LECT	*A	8	M W F	100	G H		DULANY &
11265	QUIZ	*A1	10	M W	304	G H		WHIMBEY
11273	QUIZ	*A2	11	M W	304	G H		
11281	QUIZ	*A3	8	TU TH	304	G H		
11290	LECT	*B	11	M W F	100	G H		DULANY &
11302	QUIZ	*B1	9	TU TH	304	G H		WHIMBEY
11311	QUIZ	*B2	10	TU TH	304	G H		
11329	QUIZ	*B3	11	TU TH	304	G H		

PSYCH 135 STATISTICAL THINKING IN PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR PSYCH 135 IN ADDITION TO ECON. 170 OR 171 MATH. 161, OR PSYCH. 235.
*3 HOURS

11337	LECT		11	MTUWTHFS	307	G H	COHEN

COURSES FOR ADVANCED UNDERGRADUATES

PSYCH 216 CHILD PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
3 HOURS

11345	LECT		9	MTUWTHFS	319	G H	

PSYCH 250 PSYCHOLOGY OF PERSONALITY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 150 AND 250.
*3 HOURS

11353	LECT		8	MTUWTHFS	319	G H	ROSE

PSYCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE POINT AVERAGE OF 4.0 AND WRITTEN CONSENT OF THE INSTRUCTOR--IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

11361	CONF		ARR				STAFF

PSYCH 294 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE POINT AVERAGE OF 4.0 AND WRITTEN CONSENT OF THE INSTRUCTOR, IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

11370	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PSYCH 326 MOTIVATION AND EMOTION.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

11388	LECT		1-3	TUWTH	319	G H	COHEN

PSYCH 338 ABNORMAL PSYCHOLOGY.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY, JUNIOR STANDING EXCEPT FOR THOSE IN THE PREMEDICAL CURRICULUM WHO MAY TAKE THE COURSE AS SECOND SEMESTER SOPHOMORES WITH FOUR HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

11396	LECT		10-12	TUWTH	319	G H	ROSE

PSYCH 390 PSYCHOLOGICAL TESTS AND MEASUREMENTS.
PREREQUISITE--PSYCH. 235.
4 HOURS OR 1 UNIT

11409	LECT		9-11	TU TH	307	G H	WHIMBEY
11417	LAB	1	1-5	TU TH	304	G H	
11425	LAB	2	1-5	M W	304	G H	

COURSES FOR GRADUATES

NOTE--THE PREREQUISITES STATED APPLY TO GRADUATE MAJORS IN PSYCHOLOGY. STUDENTS MINORING IN PSYCHOLOGY MAY, BY SPECIAL PERMISSION OF INSTRUCTORS, ENROLL IN CERTAIN OF THESE COURSES WITHOUT HAVING MET ALL OF THE PREREQUISITES.

PSYCH 441 PERSONALITY AND BEHAVIOR DYNAMICS.
PREREQUISITE--TWELVE HOURS OF PSYCHOLOGY.
1/2 UNIT

11433	LECT		1-3	TU TH	307	G H	SHULMAN

PSYCH 444 PSYCHODIAGNOSTICS, II.
PREREQUISITE--PSYCH. 443, CONSENT OF INSTRUCTOR.
1 UNIT

11441	LECT	8-12	TU TH	PSYCH CLINIC	JONIETZ
	LAB	ARR			

PSYCH 490 INDIVIDUAL RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

11450	CONF	ARR			

PSYCH 493 SEMINAR.
PREREQUISITE--SIX UNITS OF GRADUATE CREDIT IN PSYCHOLOGY--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

11468	CONF	8-10	M W	304 G H	COSTIN

PSYCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

11476	CONF	ARR			STAFF

RADIO AND TELEVISION

DEPARTMENT OFFICE 121B G H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R TV 366 ADVANCED RADIO AND TELEVISION PRACTICES, I.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

11484	CONF	ARR			LIPPOLD

R TV 367 ADVANCED RADIO AND TELEVISION PRACTICES, II.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/2 UNIT

11492	CONF	ARR			LIPPOLD

COURSES FOR GRADUATES

R TV 450 SPECIAL PROBLEMS IN TELEVISION.
PREREQUISITE--A TELEVISION COURSE IN THE AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 UNITS
*1 OR 2 UNITS

11505	CONF	ARR			LIPPOLD

R TV 462 SEMINAR IN RADIO AND TELEVISION.
SAME AS COMM. 462.
1 UNIT

11513	LECT-DISC	1-3	TU TH	123 G H	SKORNIA

R TV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN RADIO AND TELEVISION.
1 OR 2 UNITS

11521	CONF	ARR			SKORNIA

RECREATION AND MUNICIPAL PARK ADMINISTRATION

DEPARTMENT OFFICE 104 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

REC 278 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
2 OR 3 HOURS
11530 CONF ARR STAFF

REC 279 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
2 OR 3 HOURS
11548 CONF ARR STAFF

COURSES FOR GRADUATES

REC 401 FOUNDATIONS OF RECREATION.
PREREQUISITE--REC. 176 OR EQUIVALENT.
1 UNIT
11556 LECT-DISC 8-10 M W 133 ARMORY BRIGHTBILL

REC 493 SPECIAL PROJECTS.
PREREQUISITE--REC. 403 OR EQUIVALENT, RECREATION MAJOR.
1/2 TO 2 UNITS
11564 CONF ARR BRIGHTBILL

REC 499 THESIS RESEARCH.
0 TO 4 UNITS
11572 CONF ARR BRIGHTBILL

RHETORIC
INCLUDING RHETORIC AND COMPOSITION, ENGLISH
AS A SECOND LANGUAGE, AND BUSINESS AND TECHNICAL WRITING

RHETORIC AND COMPOSITION

DEPARTMENT OFFICE 100 E B

MAJOR--TWENTY HOURS IN ENGLISH EXCLUDING RHET. 101, 102, 107, 108, 151, 200, 271, 272, ENGL. 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, AND INCLUDING TEN HOURS OF ENGLISH OR AMERICAN LITERATURE, AT LEAST SIX OF WHICH MUST BE CHOSEN FROM THE ADVANCED GROUPS, AND TEN HOURS IN COMPOSITION CHOSEN FROM RHET. 143, 144, 205, 206, 227, 246, 255, 256, 263, 330, AND INCLUDING AT LEAST ONE COURSE IN EXPOSITORY WRITING. WITH THE PERMISSION OF THE ADVISER, ONE OF THE FOLLOWING COURSES MAY BE COUNTED TOWARD A COMPOSITION MAJOR--SPEECH 363, JOURN. 266, 326.
STUDENTS WHO PLAN TO ENTER GRADUATE COLLEGE MUST SATISFY THE REQUIREMENTS OF FOURTEEN HOURS OF COURSES IN ENGLISH AND AMERICAN LITERATURE.

MINOR--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER OF TWO IF TWO ARE CHOSEN--ANTHROPOLOGY, ANY FOREIGN LANGUAGE, HISTORY, HUMANITIES, LAW, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC--NOT INCLUDING APPLIED MUSIC--COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. WITH THE WRITTEN APPROVAL OF THE HEAD OF THE DEPARTMENT, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJOR OF THEIR DEPARTMENT EXCEPT FRENCH 103, GERMAN 103, LATIN 101, 102, 103, PORTUGUESE 103, 104, AND SPANISH 103. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

DEPARTMENTAL HONORS PROGRAM AND DISTINCTION--A STUDENT MAJORING IN RHETORIC AND COMPOSITION WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT -4.0 OR HIGHER- MAY EARN DISTINCTION ONLY BY COMPLETING NINE HOURS OF HONORS WORK IN ADDITION TO THE MINIMUM NUMBER OF HOURS REQUIRED FOR HIS MAJOR. THIS ADDITIONAL CREDIT MUST INVOLVE A SIGNIFICANT WRITING PROJECT IN RHETORIC 255, THE COMPLETION OF ENGLISH 297, AND ANY TWO OF THE FOLLOWING THREE HONORS COURSES ENGLISH 197, 295, 296. THE LEVEL OF DISTINCTION -DISTINCTION, HIGH DISTINCTION, HIGHEST DISTINCTION- IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THE COURSES AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE-POINT AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR--TO RECEIVE HIGHEST DISTINCTION, HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF, IN THE OPINION OF HIS INSTRUCTORS AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

COURSES FOR UNDERGRADUATES

RHET 101 FRESHMAN RHETORIC AND COMPOSITION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

11581	LECT-DISC	A	B	MTUWTHF	152	ADMIN	
		A	12	W	152	ADMIN	
11599	LECT-DISC	B	9	MTUWTHF	238	ADMIN	
		B	12	M	238	ADMIN	
11601	LECT-DISC	C	10	MTUWTHF	154	ADMIN	
		C	12	TH	154	ADMIN	
11610	LECT-DISC	D	11	MTUWTHF	142	ADMIN	
		D	12	F	142	ADMIN	

RHET 102 FRESHMAN RHETORIC AND COMPOSITION.
PREREQUISITE--RHET. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

11628	LECT-DISC	A	8	MTUWTHF	154	ADMIN	
		A	12	W	154	ADMIN	
11636	LECT-DISC	B	9	MTUWTHF	219	G H	
		B	12	M	219	G H	

RHET 133 PRINCIPLES OF COMPOSITION.
PREREQUISITE--RHET. 102 OR EQUIVALENT.
*CREDIT IS NOT GIVEN FOR RHET. 133 IN ADDITION TO RHET. 143.
*3 HOURS

11644	LECT-DISC	D	11	MTUWTHF	154	ADMIN	STEWART
		D	12	F	154	ADMIN	

RHET 144 NARRATIVE WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT, SOPHOMORE STANDING.
3 HOURS

11652	LECT-DISC	C	10	MTUWTHF	238	ADMIN	FUMENTO
		C	12	TH	238	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES

RHET 200 REMEDIAL WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH.
3 HOURS

11661	LECT-DISC	A	8	MTUWTHF	238	ADMIN	
		A	12	W	238	ADMIN	
11679	LECT-DISC	B	9	MTUWTHF	221	G H	
		B	12	M	221	G H	
11687	LECT-DISC	C	10	MTUWTHF	219	G H	
		C	12	TH	219	G H	
11695	LECT-DISC	D	11	MTUWTHF	238	ADMIN	
		D	12	F	238	ADMIN	

RHET 246 MODERN ENGLISH GRAMMAR.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

11708	LECT-DISC	A	8	MTUWTHF	219	G H	STEWART
		A	12	W	219	G H	

ENGLISH AS A SECOND LANGUAGE

DEPARTMENT OFFICE 317 E B

NOTE--NO STUDENT, WITH THE EXCEPTION OF THOSE WHO RECEIVED A SCORE OF 90 OR ABOVE ON THE OVERSEAS TEST, IS PERMITTED TO REGISTER FOR ANY REMEDIAL-RHETORIC 109, 110, AND 111-OR SERVICE-RHETORIC 114, 115, 201, 400, AND 401-COURSE IN ENGLISH AS A SECOND LANGUAGE UNTIL HE HAS TAKEN THE PLACEMENT TEST IN ENGLISH AS A SECOND LANGUAGE. AUDITORS ARE NOT PERMITTED. RHETORIC 114 AND 115 FULFILL GRADUATION REQUIREMENTS IN RHETORIC. STUDENTS MAY BE REQUIRED TO TAKE REMEDIAL COURSES BEFORE THEY ARE PERMITTED TO TAKE RHET. 114. ADVISERS SHOULD CONSULT THE UNDERGRADUATE STUDY BULLETIN UNDER THE SECTION ENTITLED--GENERAL REQUIREMENTS FOR GRADUATION-ENGLISH--FOR THE DEFINITION OF A FOREIGN STUDENT.

COURSES FOR UNDERGRADUATES

RHET 109 ENGLISH AS A SECOND LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS. RECOMMENDATION FROM ILLINOIS PLACEMENT TEST.
NO CREDIT

11716	LECT-DISC	C	10-12	MTUWTHFS	112	E B	

RHET 110 ENGLISH AS A SECOND LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS. RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
•NO CREDIT

11724	LECT-DISC	B	9	MTUWTHFS	110	E B	

RHET 111 ENGLISH AS A SECOND LANGUAGE.
PREREQUISITE--RHET. 109, RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
NO CREDIT

11732	LECT-DISC	C	10-12	MTUWTHFS	110	E B	

RHET 114 COMPOSITION FOR UNDERGRADUATE FOREIGN STUDENTS.
PREREQUISITE--RHET. 111, RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
•FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
•AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
•0 OR 3 HOURS

11741	LECT-DISC	C	10	MTUWTHFS	108	E B	

RHET 115 COMPOSITION FOR UNDERGRADUATE FOREIGN STUDENTS.
PREREQUISITE--RHET. 114 AND/OR RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

11759	LECT-DISC	D	11	MTUWTHFS	108	E B	

COURSES FOR GRADUATES

RHET 400 VERBAL COMMUNICATION IN ENGLISH AS A SECOND LANUAGE FOR GRADUATE FOREIGN STUDENTS, I.
PREREQUISITE--GRADUATE STANDING AND RHET. 111, OR CONSENT OF INSTRUCTOR.
3 HOURS--NO GRADUATE CREDIT

11767	LECT-DISC	A	8	MTUWTHFS	119	E B	

BUSINESS AND TECHNICAL WRITING

DEPARTMENT OFFICE 3178 D K H

COURSES FOR ADVANCED UNDERGRADUATES

RHET 251 BUSINESS WRITING.
PREREQUISITE--RHET. 101 AND 102, OR EQUIVALENT.
3 HOURS

11775	LECT-DISC	C	10	MTUWTHF	126	COM W	BAKER
		C	2	TU	126	COM W	BAKER
11783	LECT-DISC	D	11	MTUWTHF	126	COM W	CHAPDU
		D	3	TU	126	COM W	CHAPDU

RHET 272 REPORT WRITING.
PREREQUISITE--RHET. 101, 102, AND 151, OR CONSENT OF CHAIRMAN OF DIVISION.
2 HOURS

11791	LECT-DISC	B	9	MTUWTH	126	COM W	FELTON
11804	LECT-DISC	E	1	MTUWTH	126	COM W	GIESELMAN

RUSSIAN

SLAVIC LANGUAGES AND LITERATURES
DEPARTMENT OFFICE 260 L H

MAJOR--TWENTY HOURS OF RUSSIAN EXCLUDING RUSSIAN 101, 102, 103, AND 104, AND INCLUDING RUSSIAN 201, 202, 211, 212, 213, AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, A MINIMUM OF SIX HOURS IN RUSSIAN 321, 322, 323, 324, 325, AND 332, AND A MINIMUM OF TWO AND A MAXIMUM OF SIX HOURS IN RUSSIAN 309, 310, 312, 331.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH--EXCLUDING RHET. 101 AND 102--, FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GER. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT SUBJECT. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES--WITH THE EXCEPTION OF COURSES IN RUSSIAN--IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

RUSS 101 FIRST-YEAR RUSSIAN, I.
FOR STUDENTS WHO HAVE NO CREDIT IN RUSSIAN.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR RUSS. 101 WITHOUT RUSS. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

11812	LECT-DISC	A	8-10	MTUWTH	240	L	H	STAFF

RUSS 102 FIRST-YEAR RUSSIAN, II.
PREREQUISITE--RUSS. 101.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

11821	LECT-DISC	C	10-12	MTUWTH	240	L	H	STAFF

RUSS 103 SECOND-YEAR RUSSIAN, I.
PREREQUISITE--RUSS. 102 OR EQUIVALENT.
4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

11839	LECT-DISC	A	8-10	MTUWTH	305	G	H	STAFF

COURSES FOR ADVANCED UNDERGRADUATES

RUSS 211 ORAL RUSSIAN, I.
PREREQUISITE--RUSS. 103 AND 104 OR CONSENT OF INSTRUCTOR.
2 HOURS

11847	LECT-DISC	F	2	MTUWTH	305	G	H	HILL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RUSS 311 ADVANCED RUSSIAN CONVERSATION.
PREREQUISITE--THREE YEARS OF COLLEGE RUSSIAN, INCLUDING RUSS. 211 AND 212, OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/4 UNIT

11855	LECT-DISC	G	3	MTUWTH	305	G	H	STAFF

RUSS 313 ADVANCED RUSSIAN COMPOSITION.
PREREQUISITE--THREE YEARS OF COLLEGE RUSSIAN, INCLUDING RUSS. 213 AND 214, OR CONSENT OF INSTRUCTOR.
2 HOURS, OR 1/4 UNIT

11863	LECT-DISC	H	4	MTUWTH	305	G	H	STAFF

RUSS 324 READINGS IN RUSSIAN LITERATURE--CHEKHOV, GORKY, BLOC.
PREREQUISITE--RUSS. 201 AND 202 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 UNIT

11871	LECT-DISC	A	8-10	M W F	270	L	H	TERRAS

COURSES FOR GRADUATES

RUSS 400 BEGINNING RUSSIAN FOR GRADUATE STUDENTS.
4 HOURS

11880	LECT-DISC	C	10-12	MTUWTH	207	G	H	STAFF

RUSS 401 READINGS IN RUSSIAN FOR GRADUATE STUDENTS.
PREREQUISITE--RUSS. 400 OR EQUIVALENT.
4 HOURS

11898	LECT-DISC	A	8-10	MTUWTH	207	G	H	STAFF

RUSS 417 HISTORY OF THE RUSSIAN LANGUAGE.
PREREQUISITE--RUSS. 405.
1 UNIT

11901	LECT-DISC	C	10-12	M W F	270	L	H	HILL

RUSS 421 SEMINAR IN THE RUSSIAN NOVEL.
PREREQUISITE--RUSS. 322 AND 324.
*MAY BE REPEATED NOT TO EXCEED 3 UNITS OF CREDIT.
*1 UNIT
11919 LECT-DISC E 1-3 M W F 207 G H TERRAS

RUSS 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN RUSSIAN.
1/4 TO 2 UNITS
11927 CONF ARR

RUSS 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
11935 CONF ARR

CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES

DEPARTMENT OFFICE 1207 W OREGON

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

MAJOR--STUDENTS WHO ELECT RUSSIAN LANGUAGE AND AREA STUDIES AS A MAJOR MUST,
1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE SCIENCES AND LETTERS CURRICULUM.
2-COMPLETE AT LEAST TWENTY SEMESTER HOURS OF RUSSIAN LANGUAGE COURSES, IN ADDITION TO RUSS. 101-102, OR DEMONSTRATE EQUIVALENT PROFICIENCY.
3-COMPLETE A MAJOR CONSISTING OF AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST FOUR DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE PROGRAM OF RUSSIAN LANGUAGE AND AREA STUDIES MAY NOT COUNT AS PART OF THIS TWENTY HOURS.

ANTH. 381, 382	POL. S. 335, 383
ECON. 357	RUSS. 309, 310, 311, 312, 322,
GEOG. 353	323, 324, 325, 332, 333
HIST. 219, 220, 320, 321,	SOC. 350
325, 326, 327, 328	UKR. 396, 398

4-COMPLETE A MINOR OF TWENTY HOURS, EXCLUDING COURSES OPEN TO FRESHMEN, IN ONE OR TWO DEPARTMENTS. IF TWO ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH. COURSE IN THE RUSSIAN LANGUAGE MAY, WITH THE APPROVAL OF THE CENTER DIRECTOR, CONSTITUTE ALL OR PART OF THIS MINOR.

RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR--A MINOR IN RUSSIAN LANGUAGE AND AREA STUDIES, DESIGNED TO ACCOMPANY A MAJOR IN ANY DEPARTMENT, REQUIRES AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST THREE DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. IT ALSO REQUIRES A KNOWLEDGE OF RUSSIAN EQUIVALENT AT LEAST TO THAT NORMALLY ATTAINED AFTER RUSS. 101-102.

ANTH. 381, 382	POL. S. 335, 383
ECON. 357	RUSS. 309, 310, 311, 312, 321,
GEOG. 353	323, 324, 325, 332, 333
HIST. 219, 220, 320, 321,	SOC. 350
325, 326, 327, 328	UKR. 396, 398

GRADUATE MINORS IN RUSSIAN LANGUAGE AND AREA STUDIES

MINOR FOR THE MASTERS DEGREE--A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST EARN AT LEAST TWO UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN BELOW. THE COURSES CHOSEN MUST BE IN AT LEAST TWO DEPARTMENTS.

ANTH. 381, 382	POL. S. 335, 383, 435
ECON. 357	RUSS. 309, 310, 311, 312, 321, 322,
	323, 324, 325, 332, 333,
GEOG. 353, 495	405, 410, 412, 413, 415,
	416, 417, 421, 423, 460
HIST. 320, 321, 325, 326,	SOC. 350, 450
327, 328, 427	UKR. 396, 398
LAW. 369	

MINOR FOR THE PH.D. DEGREE--A DOCTORAL CANDIDATE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST DEMONSTRATE A READING COMMAND OF RUSSIAN AS TESTED BY EXAMINATION OR BY COMPLETION OF RUSSIAN 104 OR 401 WITH A GRADE OF A OR B, AND IN ADDITION MUST EARN AT LEAST FOUR UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN JUST ABOVE. THE FOUR UNITS MUST BE DISTRIBUTED AMONG AT LEAST TWO DEPARTMENTS OUTSIDE OF, AND MAY AT THE SAME TIME INCLUDE UP TO ONE UNIT FROM WITHIN, THE DEPARTMENT OFFERING THE CANDIDATES MAJOR.

CERTIFICATE OF GRADUATE SPECIALIZATION IN RUSSIAN LANGUAGE AND AREA STUDIES

THIS CERTIFICATE IS AWARDED BY THE GRADUATE COLLEGE AND THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES. IT IS FOR PERSONS WITH THE BACCALAUREATE WHO ARE ENROLLED IN ADVANCED STUDIES IN ANY DISCIPLINE AND WHO WISH AT THE SAME TIME TO GAIN A KNOWLEDGE OF THE RUSSIAN AREA AND LANGUAGE. THE REQUIREMENTS ARE--1--A GOOD COMMAND OF WRITTEN AND SPOKEN RUSSIAN, AS DETERMINED BY SPECIAL EXAMINATIONS. 2--AT LEAST SIX GRADUATE UNITS RELATING TO RUSSIAN, DISTRIBUTED AMONG AT LEAST THREE OF THE DEPARTMENTS REPRESENTED IN THE PROGRAM--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, LAW, POLITICAL SCIENCE, RUSSIAN AND SOCIOLOGY--IN ADDITION TO THE STUDENTS OWN MAJOR DEPARTMENT. FOR COURSES, SEE ABOVE.
IF THE STUDENTS MAJOR DEPARTMENT IS ONE OF THESE EIGHT HE MAY COUNT, AS PART OF HIS SIX UNITS, UP TO ONE UNIT FROM WITHIN HIS MAJOR DEPARTMENT.
3--A SPECIAL ESSAY BASED LARGELY ON RUSSIAN SOURCES AND TO BE, AT THE MINIMUM, OF THE STANDARD NORMALLY REQUIRED IN A MASTERS THESIS. THE STUDENT MAY SUBMIT, IN FULFILLMENT OF THIS REQUIREMENT, A COPY OF HIS MASTERS THESIS OR DOCTORAL DISSERTATION.

THE ADVISER FOR THE GRADUATE MINORS AND THE CERTIFICATE IS PROFESSOR RALPH T. FISHER, JR., DIRECTOR OF THE CENTER FOR LANGUAGE AND AREA STUDIES, 1207 WEST OREGON.

STUDENTS IN OTHER COLLEGES

STUDENTS IN OTHER COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO DESIRE A KNOWLEDGE OF THE RUSSIAN AREA ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH PROGRAMS MAY IN SOME CASES BE ADOPTED AS A SPECIAL MINOR.

BELOW ARE LISTED COURSES APPROVED FOR THE RUSSIAN LANGUAGE AND AREA STUDIES PROGRAMS WHICH ARE BEING OFFERED THIS TERM. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.

GEOG. 353	RUSS. 311	RUSS. 417
HIST. 220	RUSS. 313	RUSS. 421
HIST. 320	RUSS. 324	

SAFETY EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR GRADUATES

S ED 402 PROBLEMS IN SAFETY EDUCATION.
1 UNIT
11943 LECT-DISC C 10 MTUWTH 133 ARMORY FLORIO

SECONDARY AND CONTINUING EDUCATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR ADVANCED UNDERGRADUATES

SE ED 240 PRINCIPLES OF SECONDARY EDUCATION.
PREREQUISITE--SE. ED. 101 AND PSYCH. 100.
2 HOURS

11951	LECT-DISC	2	TUWTHF	162	EDUC	HIPPLE

COURSES FOR GRADUATES

SE ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT
SECTION C IS FOR STUDENTS OF HIGHER EDUCATION ONLY.

11960	LECT-DISC N	10	TUWTHF	162	EDUC	DEBOER
11978	LECT-DISC L	8	TUWTHF	173	ARMORY	ERICKSON
11986	LECT-DISC *C	11-3	W F	96	COM W	EPPERSON

SE ED 448 CONTINUING EDUCATION.
1/2 OR 1 UNIT
MEETS FIRST FOUR WEEKS ONLY

11994	LECT-DISC	1-3	TUWTHF	25	EDUC	ANDERSON

SE ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

12009	CONF	ARR				GRADUATE STAFF

SE ED 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.
1 UNIT
SECTION L IS FOR ENGLISH, SECTION M IS FOR SOCIAL STUDIES, AND SECTION N IS FOR SCIENCE.

12017	LECT-DISC L	8	TUWTHF	24	COM W	DEBOER
12025	LECT-DISC M	9	TUWTHF	250	ARMORY	METCALF
12033	LECT-DISC N	11	TUWTHF	4G	EDUC	BURNETT

SE ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1 TO 2 UNITS
*SECTION B IS RESTRICTED TO NATIONAL SCIENCE FOUNDATION MATHEMATICS PROGRAM. JULY 5 THRU AUGUST 12.

12041	LECT-DISC B	ARR				STAFF

SE ED 467 THE AMERICAN COLLEGE.
1 UNIT

12050	LECT-DISC	8-10	W F	10	EDUC	EPPERSON

SE ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

12068	LECT-DISC	11	TUWTHF	10	EDUC	METCALF

SE ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

12076	CONF	ARR				GRADUATE STAFF

SE ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

12084	CONF	ARR				GRADUATE STAFF

SOCIAL SCIENCES

THE DIVISION OF SOCIAL SCIENCES SPONSORS THE FOLLOWING PROGRAMS--A-AN UNDERGRADUATE MAJOR AND MINOR IN LATIN AMERICAN STUDIES, B-A GRADUATE MINOR IN LATIN AMERICAN STUDIES, C-AN UNDERGRADUATE MAJOR AND MINOR IN RUSSIAN AREA STUDIES, D-A GRADUATE MINOR IN RUSSIAN AREA STUDIES, E-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE SOCIAL SCIENCES, F-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE TEACHING OF SOCIAL STUDIES. G-A GRADUATE MAJOR AND MINOR AND UNDERGRADUATE MINOR IN LINGUISTICS.

THE STUDY OF INTERNATIONAL AFFAIRS AND OF NON-WESTERN AREAS. THE DIVISION OF SOCIAL SCIENCES CALLS TO THE ATTENTION OF STUDENTS THE OFFERINGS IN THE GENERAL FIELD OF INTERNATIONAL AFFAIRS AND OF NON-WESTERN AREAS FOUND AT THE UNIVERSITY OF ILLINOIS. THE DIVISION RECOMMENDS THAT THE STUDENT INTERESTED IN INTERNATIONAL AFFAIRS AND NON-WESTERN AREAS CONSULT WITH THE ADVISOR IN HIS MAJOR DEPARTMENT OR WITH THE CENTERS FOR ASIAN, LATIN AMERICAN, AND RUSSIAN LANGUAGE AND AREA STUDIES CONCERNING THE POSSIBILITY OF TAKING COURSES IN THESE SUBJECTS, EITHER AS PART OF A MINOR OR SPLIT MINOR OR AS ELECTIVES.

ENTRANCE EXAMINATIONS FOR THE FOREIGN SERVICE OF THE UNITED STATES. STUDENTS INTERESTED IN PREPARING FOR THESE EXAMINATIONS ARE URGED TO CONSULT WITH THE GOVERNMENT PLACEMENT CONSULTANT OF THE UNIVERSITY PLACEMENT SYSTEM, WHO MAY BE SEEN AT THE INSTITUTE OF GOVERNMENT AND PUBLIC AFFAIRS, 1201 WEST NEVADA STREET.

SOCIOLOGY

DEPARTMENT OFFICE 342 L H

MAJOR--TWENTY HOURS FROM COURSES IN SOCIOLOGY, EXCLUDING SOCIOLOGY 100, 104, AND 105. SOCIOLOGY MAJORS ARE REQUIRED TO TAKE SOCIOLOGY 184, 185, 300, AT LEAST ONE COURSE FROM AMONG 212, 320, 321, AND 323-THE INTERPERSONAL RELATIONS AREA-, AND AT LEAST ONE COURSE FROM AMONG 218, 223, 322, AND 270-THE SOCIETAL ANALYSIS AREA-.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE PSYCHOLOGY AND SOCIAL WORK. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.

DEPARTMENTAL DISTINCTION--IN ORDER TO BE AWARDED DISTINCTION IN SOCIOLOGY AT GRADUATION, THE STUDENT MUST 1 -HAVE AT LEAST A 4.0 ALL UNIVERSITY GRADE POINT AVERAGE, 2 - MEET THE GENERAL REQUIREMENTS FOR A MAJOR IN SOCIOLOGY, AND, 3- IN ADDITION TO THE WORK DONE FOR THE MAJOR, EARN FOUR SEMESTER HOURS OF CREDIT BY ENROLLING IN BOTH OF THE HONORS COURSES--SOC. 290-291.

COURSES FOR UNDERGRADUATES

SOC 185 INTRODUCTION TO SOCIAL STATISTICS.
SAME AS GEOG. 185.
PREREQUISITE--SOC. 100 OR CONSENT OF INSTRUCTOR OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS
12092 LECT-DISC C 10-12 M W F 111 G H DEVRIES

SOC 190 INDIVIDUAL TOPICS FOR UNDERGRADUATES.
PREREQUISITE--SIX HOURS OF SOCIOLOGY OR THREE HOURS OF SOCIOLOGY AND CONCURRENT REGISTRATION IN ANOTHER SOCIOLOGY COURSE.
1 OR 2 HOURS.
12105 CONF ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES

SOC 277 RURAL SOCIAL CHANGE.
SAME AS R. SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

12113	LECT-DISC	C	10	MTUWTHF	316S M H	FOLSE
		C	11	TU	316S M H	

SOC 291 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

12121	CONF		ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOC 315 SOCIOLOGY OF EDUCATION.
SAME AS HP. ED. 315.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D.G.S. 151 AND 152.
3 HOURS, OR 1/2 OR 1 UNIT

12130	LECT-DISC	A	8	TUWTHF	326 L H	SUMMERS

SOC 333 SOCIOLOGY OF MENTAL HEALTH.
PREREQUISITE--SOC. 100, OR 104 AND 105, OR D. G. S. 151 AND 152,
PLUS ONE COURSE IN ABNORMAL AND ONE IN SOCIAL PSYCHOLOGY, OR
CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

12148	LECT-DISC		1-3	M W F	111 G H	DEVRIES

COURSES FOR GRADUATES

SOC 412 SEMINAR IN SOCIAL AND CULTURAL RELATIONS OF PERSONALITY.
1 UNIT

12156	CONF	C	10-12	M TH	348 L H	SUMMERS

SOC 435 FIELD INSTRUCTION AND RESEARCH IN PENAL SOCIOLOGY.
APPLICATION FOR ADMISSION TO THIS COURSE MUST BE MADE IN APRIL
PRIOR TO THE SUMMER SESSION IN WHICH ENROLLMENT IS DESIRED.
.PREREQUISITE--SOC. 324 AND 331 OR EQUIVALENT, CONSENT OF
INSTRUCTOR, AND PASSING ROUTINE EMPLOYMENT CLEARANCE PROCEDURES
BY THE PRISON.
1 UNIT

12164	CONF		ARR	STAFF

SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS R. SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS.

12172	LECT-DISC	C	10-12	MTUWTH	313 M H	LINDSTROM

SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS R. SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY,
CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

12181	CONF		ARR	STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
1/2 TO 2 UNITS

12199	CONF		ARR	STAFF

SOC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS
THESIS.

12201	CONF	*A	ARR	STAFF
12210	CONF	*B	ARR	STAFF

SPANISH

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN SPANISH, EXCLUDING SPANISH 101,102,103, 104, AND 115, AND INCLUDING AT LEAST EIGHT HOURS OF SPANISH FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. EITHER LING. 300, INTRODUCTION TO LINGUISTICS, OR LING. 302, COMPARATIVE LINGUISTICS, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH. EITHER SOC.SCI. 101 OR 102, LATIN-AMERICAN CIVILIZATION, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH AND IS REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN, EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LATIN-AMERICAN STUDIES, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, AND RUSSIAN.

COURSES FOR UNDERGRADUATES

SPAN 101 ELEMENTARY SPANISH, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR SPAN. 101 WITHOUT SPAN. 102.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL.
*SECTION *A REQUIRES CONCURRENT REGISTRATION IN SPAN. 102 *B AND IS OPEN ONLY TO PARTICIPANTS IN THE INSTITUTE IN SPANISH AND LATIN-AMERICAN LIBRARIANSHIP.

12236	LECT-DISC	*A	8	MTUWTHF	43	L I R		
		*A	2	MTUW	43	L I R		
12228	LECT-DISC	C	10-12	MTUWTH	313	G H		WOODYARD

SPAN 102 ELEMENTARY SPANISH, II.
PREREQUISITE--SPAN. 101 OR ONE YEAR OF HIGH SCHOOL SPANISH.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL
*SECTION *B REQUIRES CONCURRENT REGISTRATION IN SPAN. 101 *A AND IS OPEN ONLY TO PARTICIPANTS IN THE INSTITUTE IN SPANISH AND LATIN-AMERICAN LIBRARIANSHIP.

12244	LECT-DISC	A	8-10	MTUWTH	315	G H		
12252	LECT-DISC	*B	9	MTUWTHF	43	L I R		
		*B	2	THF	43	L I R		
		*B	3	M	43	L I R		

SPAN 103 INTERMEDIATE SPANISH, I.
PREREQUISITE--SPAN. 102 OR TWO YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

12261	LECT-DISC		1-3	MTUWTH	313	G H		WOODYARD

SPAN 104 INTERMEDIATE SPANISH, II.
PREREQUISITE--SPAN. 103 OR THREE YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

12279	LECT-DISC		3-5	MTUWTH	313	G H		

COURSES FOR ADVANCED UNDERGRADUATES

SPAN 211 INTERMEDIATE COMPOSITION AND CONVERSATION, I.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
3 HOURS

12287	LECT-DISC	X	12	F	315	G H		BALDWIN
		X	1	MTUWTHF	315	G H		

SPAN 212 INTERMEDIATE COMPOSITION AND CONVERSATION, II.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 211 OR EQUIVALENT.
3 HOURS

12295	LECT-DISC	X	12	F	315	G	H	BALDWIN
		X	1	MTUWTHF	315	G	H	

SPAN 213 ADVANCED COMPOSITION AND CONVERSATION, I.
PREREQUISITE--SPAN. 212 OR EQUIVALENT.
3 HOURS

12308	LECT-DISC	X	12	F	315	G	H	BALDWIN
		X	1	MTUWTHF	315	G	H	

SPAN 214 ADVANCED COMPOSITION AND CONVERSATION, II.
PREREQUISITE--SPAN. 213 OR EQUIVALENT.
3 HOURS

12316	LECT-DISC	X	12	F	315	G	H	BALDWIN
		X	1	MTUWTHF	315	G	H	

SPAN 221 SPANISH DRAMA AND POETRY OF THE TWENTIETH CENTURY.
PREREQUISITE--SPAN. 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
3 HOURS

12324	LECT-DISC	F	2	MTUWTHF	315	G	H	BALDWIN
		F	3	M	317	G	H	

SPAN 291 SENIOR THESIS.
FOR CANDIDATES FOR HONORS IN SPANISH.
2 HOURS

12332	CONF	ARR		STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED COURSES IN SPANISH UNLESS OTHERWISE NOTED HAVE THE FOLLOWING PREREQUISITE--SPAN. 222 OR EQUIVALENT.

SPAN 308 MODERNISMO AND CONTEMPORARY SPANISH AMERICAN POETRY.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
3 HOURS, OR 1/2 UNIT

12341	LECT-DISC	G	3	MTUWTHF	315	G	H	FORSTER
		G	4	F	315	G	H	

SPAN 314 SPANISH DRAMA AND POETRY OF THE GOLDEN AGE.
PREREQUISITE--SPAN. 305, 306, 307, OR 308, OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT

12359	LECT-DISC		1	MTUWTH	170	L	H	MORINIGO

SPAN 332 LA CULTURA HISPANICA--HISPANOAMERICA.
EITHER SPAN. 331 OR 332 REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT

12367	LECT-DISC		4	MTUWTH	315	G	H	FORSTER

SPAN 351 PHONETICS.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT

12375	LECT-DISC		11	MTUWTH	170	L	H	ALLEN

SPAN 352 SYNTAX.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS, OR 1/2 UNIT.

12383	LECT-DISC		10	MTUWTH	315	G	H	KAHANE

SPAN 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., GER., AND RUSS. 382.
PREREQUISITE--3 YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS, OR 1/2 UNIT

12391	LECT-DISC		10	MTUWTH	232	L	H	MYERS

COURSES FOR GRADUATES

SPAN 417 SEVENTEENTH-CENTURY LITERATURE.
1 UNIT

12404	LECT-DISC	2	MTUWTH	170	L H	MORINIGO

SPAN 422 CONTEMPORARY SPANISH NOVEL AND ESSAY.
1 UNIT

12412	LECT-DISC	9	MTUWTH	313	G H	SHOEMAKER

SPAN 453 HISTORY OF THE SPANISH LANGUAGE.
1 UNIT

12421	LECT-DISC	10	MTUWTH	170	L H	ALLEN

SPAN 491 SPECIAL TOPICS IN SPANISH.
1/2 OR 1 UNIT

12439	CONF	ARR	STAFF

SPAN 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

12447	CONF	ARR	ALLEN, FORSTER KAHANE, MORINIGO SHOEMAKER

SPECIAL EDUCATION

DEPARTMENT OFFICE 220 EDUC

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SP ED 316 THE GIFTED CHILD IN SCHOOL AND SOCIETY.
PREREQUISITE--ED. PSY. 211 OR EL. ED. 236.
3 HOURS, OR 1/2 TO 1 UNIT

12455	LECT-DISC	8	TUWTHF	25	EDUC	M KARNES

SP ED 318 WORKSHOP AND LABORATORY IN EDUCATION OF EXCEPTIONAL CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
4 TO 8 HOURS, OR 1 TO 2 UNITS
*SECTION B IS FOR LEARNING DISABILITIES AND WILL BE OFFERED FOR 8 WEEKS
*SECTION C IS GIFTED INSTITUTE AND WILL BE OFFERED FOR EIGHT WEEKS.
*SECTION X IS SPECIAL WORKSHOP FOR OPE PSYCHOLOGISTS AND WILL BE OFFERED FIRST FOUR WEEKS ONLY.

12463	LECT-DISC *B	9-3	MTUWTHF	210	EDUC	C KASS
12471	LECT-DISC *C	9-3	MTUWTHF	428	ARMORY	ROGGE
12480	LECT-DISC *X	9-3	MTUWTHF	210	EDUC	C MADSEN

SP ED 321 EDUCATION OF DISTURBED AND CONDUCT-PROBLEM CHILDREN.
PREREQUISITE--SP. ED. 117 OR EQUIVALENT AND EL. ED. 236, OR EQUIVALENT.
3 HOURS, OR 1/2 TO 1 UNIT

12498	LECT-DISC	8	TUWTHF	385	EDUC	O HURLEY

SP ED 324 MENTAL AND EDUCATIONAL MEASUREMENT OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SP. ED. 117, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

12501	LECT-DISC	10-12	TUWTHF	382	EDUC	O HURLEY

SP ED 417 PSYCHO-EDUCATIONAL PROBLEMS OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SIXTEEN HOURS OF PSYCHOLOGY AND/OR EDUCATION, OR CONSENT OF INSTRUCTOR.
1 UNIT
*THESE SECTIONS RESTRICTED TO NDEA ELEMENTARY GUIDANCE INSTITUTE STUDENTS ONLY.

12519	LECT-DISC A	11	TUWTHF	22	EDUC	R HENDERSON
12527	LECT-DISC *G1	9	TUWTHF	96	COM W	R HENDERSON
12535	LECT-DISC *G2	10	TUWTHF	15	COM W	R HENDERSON

SP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

12543	CONF	ARR		210	EDUC	STAFF

SP ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1 TO 2 UNITS

12551	LECT-DISC A	9-3	MTUWTHF	210	EDUC	L JORDAN

SP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

12560	CONF	ARR		210	EDUC	STAFF

SP ED 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

12578	CONF	ARR		210	EDUC	STAFF

SPEECH AND THEATRE

DEPARTMENT OFFICE 133 L H

MAJOR--TWENTY HOURS IN SPEECH IN ADDITION TO SPCH. 101, 105, AND 141. AT LEAST FIVE OF THE TWENTY HOURS MUST BE IN COURSES NUMBERED 300 OR HIGHER, SPCH. 301 MUST BE INCLUDED. IN DECLARING A MAJOR IN SPEECH THE STUDENT MAY CHOOSE ONE OF THESE AREAS FOR EMPHASIS--GENERAL SPEECH, PUBLIC ADDRESS, INTERPRETATION, THEATRE ART, SPEECH SCIENCE AND PHONETICS, SPEECH CORRECTION AND AUDIOLOGY.
THE STUDENT SHOULD REPORT TO 133 LINCOLN HALL TO BE ASSIGNED AN AREA ADVISER WITH WHOM HE MAY CONFER CONCERNING REQUIRED AND RECOMMENDED COURSES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED WITH THE APPROVAL OF THE STUDENTS MAJOR ADVISER AND HIS DEPARTMENT HEAD. IF TWO MINOR SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE INCLUDED IN EACH. A MINOR PROGRAM IN ENGLISH MAY NOT INCLUDE MORE THAN THREE HOURS IN LITERATURE COURSES OPEN TO FRESHMEN AND SOPHOMORES AND MAY NOT INCLUDE RHET. 101, 102, 151, 271, AND 272. NO LANGUAGE COURSES MAY SATISFY THE MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THE LANGUAGE DEPARTMENTS.

TWO TEACHER-TRAINING CURRICULA ARE OFFERED IN SPEECH. SEE THE CURRICULUM PREPARATORY TO SPEECH CORRECTION WORK AND THE CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH.

COURSES FOR UNDERGRADUATES

SPCH 101 PRINCIPLES OF EFFECTIVE SPEAKING.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

12586	LECT-DISC	A1	8	MTUWTH	205	G H	
		A1	8-10	F	205	G H	
12594	LECT-DISC	B1	9	MTUWTH	262	ARMORY	
		B1	8-10	F	262	ARMORY	
12607	LECT-DISC	C1	10	TUWTHF	255	ARMORY	
		C1	10-12	M	255	ARMORY	
12615	LECT-DISC	C2	10-12	M	205	G H	
		C2	10	TUWTHF	205	G H	
12623	LECT-DISC	E1	1-3	M W F	255	ARMORY	

SPCH 113 GROUP DISCUSSION AND CONFERENCE LEADERSHIP.
PREREQUISITE--SOPHOMORE STANDING. BY PERMISSION OF THE HEAD OF THE DEPARTMENT THE PREREQUISITE MAY BE WAIVED FOR SUPERIOR STUDENTS, INCLUDING JAMES SCHOLARS.
3 HOURS

12631	LECT-DISC	C	10-12	M W F	116	L H	

SPCH 141 ORAL INTERPRETATION.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 2 HOURS CREDIT.
*3 HOURS

12640	LECT-DISC	B	9	M WTHF	255	ARMORY	HAWKINS
		B	8-10	TU	255	ARMORY	

SPCH 157 ELEMENTS OF STAGECRAFT.
4 HOURS

12658	LECT-DISC	B	9-11	MTUWTH	L H THEATRE		LLEWELLYN

COURSES FOR ADVANCED UNDERGRADUATES

SPCH 208 CLASSROOM PROBLEMS IN SPEECH CORRECTION.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

12666	LECT-DISC	N	10-12	TUWTH	130	L H	GOOD

SPCH 291 HONORS COURSE.
PREREQUISITE--SENIOR STANDING, A GRADE-POINT AVERAGE OF 4.0 OR CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

12674	CONF		ARR				STAFF

SPCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF SPEECH, GRADE-POINT AVERAGE OF 3.75, CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

12682	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPCH 312 AMERICAN PUBLIC ADDRESS.
3 HOURS, OR 1/2 OR 1 UNIT

12691	LECT-DISC	B	9-11	M W F	121	L H	BROADRICK

SPCH 342 ORAL INTERPRETATION OF POETRY.
PREREQUISITE--SPCH. 141.
3 HOURS, OR 1/2 OR 1 UNIT

12703	LECT-DISC	C	10	M WTHF	262	ARMORY	SLOAN
		C	10-12	TU	262	ARMORY	

SPCH 355 ADVANCED PLAY DIRECTING.
PREREQUISITE--SPCH. 255 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

12711	LECT-DISC	C	10-12	M W F	160	ARMORY	

SPCH 363 ADVANCED PLAYWRITING.
PREREQUISITE--SPCH. 263, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE SIX HOURS OR TWO UNITS.
*3 HOURS, OR 1/2 OR 1 UNIT

12720	LECT-DISC		ARR			SMALLEY

SPCH 376 SPEECH SCIENCE, II.
SAME AS LING. 376.
PREREQUISITE--SPCH. 375 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED

12738	LECT-DISC *B	9	MTUWTHF	104	SP CLINIC	ZEMLIN

SPCH 383 DEVELOPMENT OF SPOKEN LANGUAGE.
PREREQUISITE--SENIOR STANDING AND CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED

12746	LECT-DISC *E	1	MTUWTHF	106	SP CLINIC	NASCA

SPCH 397 MEASUREMENT OF AUDITORY PERCEPTION.
PREREQUISITE--SPCH. 391.
3 HOURS, OR 1/2 OR 1 UNIT

12754	LECT-DISC F	2	MTUWTHF	106	SP CLINIC	STARK

COURSES FOR GRADUATES

SPCH 403 SEMINAR FOR TEACHERS OF SPEECH.
1 UNIT

12762	LECT-DISC		ARR			BURNS

SPCH 412 THE ROMAN TRADITION IN RHETORIC AND ORATORY.
1 UNIT

12771	LECT-DISC		ARR			DIETER

SPCH 438 SEMINAR IN RHETORICAL THEORY.
1 UNIT

12789	LECT-DISC		ARR			CRONKHITE

SPCH 452 PROBLEMS IN PLAY PRODUCTION IN THE EDUCATIONAL THEATRE.
1 UNIT

12797	LECT-DISC N	10-12	TU TH	116	L H	ARBENZ

SPCH 461 ADVANCED THEATRE TECHNIQUES.
PREREQUISITE--AT LEAST 1 SEMESTER OF GRADUATE STUDY IN THE AREA OF THEATRE, CONSENT OF HEAD OF DEPARTMENT AND OF INSTRUCTOR.
1/2 OR 1 UNIT

12800	LECT-DISC L	8-10	TU TH	160	ARMORY	WORKS

SPCH 468 SEMINAR IN THEATRE HISTORY.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

12818	LECT-DISC E	1-3	M W	121	L H	HEWITT

SPCH 484 PSYCHOLOGY OF SPEECH AND HEARING DISORDERS, II.
SAME AS PSYCH. 484.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

12826	LECT-DISC		ARR	104	SP CLINIC	ONEILL

SPCH 486 ADVANCED CLINICAL TECHNIQUES IN SPEECH AND HEARING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 4 UNITS

12834	LECT-DISC		ARR	104	SP CLINIC	SIMPSON, STARK

SPCH 489 SEMINAR IN OROFACIAL AND LARYNGEAL PATHOLOGIES OF SPEECH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

12842	LECT-DISC		ARR	106	SP CLINIC	SIMPSON

SPCH 491 SEMINAR IN HEARING DISORDERS.
PREREQUISITE--SPCH. 391.
1 UNIT
12851 LECT-DISC ARR 104 SP CLINIC NASCA

SPCH 495 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF THE HEAD OF THE DEPARTMENT.
*OPEN TO MASTERS CANDIDATES FOR ONE UNIT, TO DOCTORS CANDIDATES FOR ONE OR TWO UNITS.
*1 OR 2 UNITS
12869 CONF ARR STAFF

SPCH 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
INSTRUCTORS BEHRINGER, DIETER, GULLEY, HEWITT, MURPHY, NICHOLS ONIELL, SCHEIDEL, SCOTT, SHATTUCK, SLOAN WALLACE, WENZEL.
WALLACE, WENZEL.
12877 CONF ARR STAFF

THEORETICAL AND APPLIED MECHANICS

DEPARTMENT OFFICE 212 T L

COURSES FOR UNDERGRADUATES

T A M 150 ANALYTICAL MECHANICS--STATICS.
PREREQUISITE--PHYCS. 101 OR 106. REGISTRATION IN MATH. 142 OR 143.
2 HOURS
12885 LECT-DISC P 8 MTU THF 252 E E B

COURSES FOR ADVANCED UNDERGRADUATES

T A M 211 ANALYTICAL MECHANICS--DYNAMICS.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR 143.
3 HOURS
12893 LECT-DISC P 9 MTUWTHFS 252 E E B

T A M 221 ELEMENTARY MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR 143.
3 HOURS
12906 LECT-DISC P 10 MTUWTHFS 252 E E B

T A M 223 MECHANICAL BEHAVIOR OF SOLIDS.
PREREQUISITE--REGISTRATION IN T.A.M. 221.
1 HOUR
12914 LAB P 3-5 M W 225 T L

T A M 235 FLUID MECHANICS.
PREREQUISITE--T.A.M. 211 OR 212.
4 HOURS
12922 LECT-DISC E 9 MTUWTHFS 225A T L
LAB E 3-5 TU TH 126 T L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

T A M 311 MECHANICAL VIBRATIONS.
PREREQUISITE--T A M 154 OR 156 OR 211 OR 212 AND 221.
3 HOURS, OR 1/2 OR 1 UNIT
12931 LECT-DISC P 11 MTUWTHFS 250 E E B

T A M 321 ADVANCED MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T A M 221 AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT
12949 LECT-DISC P 8 MTUWTHFS 250 E E B

T A M 326 EXPERIMENTAL STRESS ANALYSIS.
PREREQUISITE--T A M 150, 211, 212, 221, AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT

12957	LAB-DISC	Z	10-12	MTU THF	302C T L	

T A M 346 DIMENSIONAL ANALYSIS AND THEORY OF MODELS.
3 HOURS, OR 1/2 OR 1 UNIT

12965	LECT-DISC	Z	9	MTUWTHFS	250 E E B	

COURSES FOR GRADUATES

T A M 441 APPLIED ANALYSIS IN ENGINEERING, I.
PREREQUISITE--MATH. 143.
1 UNIT

12973	LECT-DISC		10	MTUWTHFS	250 E E B	

T A M 493 ADVANCED INDEPENDENT STUDY--SPECIAL RESEARCH.
1/2 TO 2 UNITS

12981	CONF	X	ARR			STAFF

T A M 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

12990	CONF	F	ARR			KESLER
13004	CONF	O	ARR			TAYLOR
13012	CONF	M	ARR			SMITH
13021	CONF	X	ARR			STAFF

URBAN PLANNING

DEPARTMENT OFFICE 208 M H

COURSES FOR GRADUATES

UP 488 URBAN PLANNING RESEARCH.
PREREQUISITE--U. P. 171 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

13039	CONF		ARR			STAFF

UP 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN URBAN PLANNING.
1/2 TO 2 UNITS

13047	CONF		ARR			STAFF

VETERINARY MEDICAL SCIENCE

DEPARTMENT OFFICE 131 V M

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

V M S 308 HISTOCHEMISTRY
PREREQUISITE--V.M.S. 301 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

13055	LAB	A	ARR			ST. CLAIR

V M S 392 SPECIAL PROBLEMS.
PREREQUISITE--REGISTRATION IN VETERINARY CURRICULUM WITH GRADE POINT AVERAGE OF 3.5 OR ABOVE.
*STUDENTS MAY ACCUMULATE ONE UNIT.
*1/2 UNIT

13063	LAB	A	ARR			STAFF

COURSES FOR GRADUATES

V M S 416 EPIZOOTIOLOGY.
PREREQUISITE--V.P.H. 331, V.M.S. 332 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1 UNIT

13071	LECT-DISC	A	ARR		BRANDLY, FERRIS, KOKERNOT, LEVINE

V M S 459 ADVANCED CORRELATIVE PATHOLOGY.
PREREQUISITE--V.M.S. 335, 308, 445, 450, OR EQUIVALENT AND CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

13080	LAB-DISC	A	ARR		SIMON

V M S 492 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT

13098	LAB	A	ARR		STAFF

V M S 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS

13101	LAB-DISC	A	ARR		STAFF

VETERINARY MEDICINE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

V M 392 SPECIAL PROBLEMS.
PREREQUISITE--PROFESSIONAL STANDING IN VETERINARY CURRICULUM AND GRADE POINT AVERAGE OF 3.5.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 1 UNIT
*3 HOURS, OR 1/2 UNIT

13119	LAB	A	ARR		STAFF

VOCATIONAL AND TECHNICAL EDUCATION

DEPARTMENT OFFICE 347A EDUCATION BUILDING

COURSES FOR UNDERGRADUATES

VOTEC 189 INDUSTRIAL PRACTICES.
PREREQUISITE--SOPHOMORE STANDING, ENROLLMENT IN INDUSTRIAL EDUCATION OPTIONS II AND III.
*STUDENTS MAY ACCUMULATE SEVENTEEN HOURS.
*2 OR 3 HOURS

13127	PRACT	ARR			CAMPBELL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

VOTEC 382 COOPERATIVE VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS.
2 TO 4 HOURS, OR 1/2 TO 1 UNIT
MEETS SECOND FOUR WEEKS.

13143	LECT-DISC	1-4	TUWTHF	28 EDUC	JOHNSON

VOTEC 384 THE GENERAL SHOP PROGRAM.
PREREQUISITE--SIXTEEN HOURS IN APPROPRIATE VOCATIONAL AND TECHNICAL EDUCATION COURSES.
4 HOURS, OR 1 UNIT

13151	LECT-DISC	9	TUWTHF	27 EDUC	TINKHAM
	LAB	10-12	TUWTHF	48A EDUC	TINKHAM

VOTEC 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

13160	CONF		ARR				STAFF

VOTEC 450 EVALUATION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

13178	LECT-DISC		1-4	TUWTHF	22	EDUC	MATHER

VOTEC 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF VOACTIONAL AND TECHNICAL EDUCATION.
1 UNIT
*SECTION A IS FOR BUSINESS EDUCATION AND MEETS EIGHT WEEKS
*SECTION B IS FOR HOME ECON EDUCATION AND MEETS FIRST FOUR WEEKS

13186	LECT-DISC	*A	11	TUWTHF	15	D K H	MAHAFFEY
13194	LECT-DISC	*B	1	TUWTHF	22	EDUC	SPITZE
	LAB	*B	2-4	TUWTHF	22	EDUC	SPITZE

VOTEC 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1/2 OR 1 TO 2 UNITS
*SECTION A IS FOR BUSINESS EDUCATION TEACHERS AND MEETS EIGHT WEEKS. STUDY OF THE BASIC CONCEPTS OF OFFICE AUTOMATION, ITS NATURE, FUNCTIONS, PROBLEMS AND TRENDS, WITH PARTICULAR REFERENCE TO CURRICULUM DEVELOPMENT. MODERN OFFICE EQUIPMENT IS AVAILABLE FOR STUDY AND PRACTICE. CONSENT OF INSTRUCTOR IS REQUIRED. 1 UNIT.
*SECTION B IS FOR HOME ECONOMICS TEACHERS AND MEETS SECOND FOUR WEEKS. WORKSHOP IN FAMILY RELATIONS FOR THE PURPOSE OF DEVELOPING CURRICULUM MATERIALS FOR USE OF SECONDARY SCHOOL TEACHERS IN HOME ECONOMICS. 1 UNIT.
*SECTION C IS FOR HOME ECONOMICS TEACHERS AND MEETS FIRST FOUR WEEKS. WORKSHOP IN EMPLOYMENT EDUCATION IN HOME ECONOMICS, FOOD SERVICES, FOR PURPOSE OF HELPING TEACHERS MEET THE CHALLENGE OF DEVELOPING EMPHASIS ON EDUCATION AND WAGE EARNING PURSUITS IN HOME ECONOMICS. 1/2 UNIT.
*SECTION D IS FOR INDUSTRIAL EDUCATION TEACHERS AND MEETS EIGHT WEEKS. PRACTICUM IN DEVELOPING CURRICULUM MATERIALS APPROPRIATE FOR USE IN INSTRUCTIONAL PROGRAMS DESIGNED TO PREPARE DISADVANTAGED YOUTH FOR EMPLOYMENT. 1 UNIT.
*SECTION E IS FOR ENDUSTRIAL EDUCATION TEACHERS AND MEETS EIGHT WEEKS. PRACTICUM IN DATA COLLECTION AND ANALYSIS FOR CURRICULUM DEVELOPMENT IN INDUSTRIAL EDUCATION. 1 UNIT.
SECTION F IS FOR INDUSTRIAL EDUCATION TEACHERS AND MEETS FIRST FOUR WEEKS. WORKSHOP ON DESIGN ANALYSIS AND EVALUATION OF JIGS AND FIXTURES, DEVELOPMENT OF CURRICULUM MATERIALS FOR THE PURPOSE OF UPDATING INDUSTRIAL EDUCATION PROGRAMS IN SECONDARY SCHOOLS AND JUNIOR COLLEGES. 1 UNIT.
SECTION G IS FOR TEACHERS OF VOCATIONAL AGRICULTURE AND MEETS FIRST FOUR WEEKS. DESIGNED TO GIVE SPECIAL ATTENTION TO THE CURRICULUM PROBLEMS INVOLVED IN INTRODUCING ORNAMENTAL HORTICULTURE INTO THE VOCATIONAL AGRICULTURE PROGRAMS OF SECONDARY SCHOOLS AND JUNIOR COLLEGES. 1/2 UNIT.
SECTION H IS FOR VOCATIONAL AGRICULTURE AND MEETS FIRST FOUR WEEKS. DESIGNED TO GIVE SPECIAL ATTENTION TO CURRICULUM PROBLEMS AND TO THE TEACHING OF COURSES FOR PERSONS PREPARING FOR GAINFUL EMPLOYMENT IN OFF-FARM AGRICULTURAL OCCUPATIONS. 1 UNIT.

13207	LECT-DISC	*A	8	TUWTHF	10	D K H	MELSON
13215	LECT-DISC	*B	8-11	TUWTHF	22	EDUC	LEMMON
13223	LECT-DISC	*C	8-12	MTUWTHF	22	EDUC	DEWAR
13231	LECT-DISC	*D	8	TUWTHF	27	EDUC	TOMLINSON
13240	LECT-DISC	*E	11	TUWTHF	27	EDUC	SCHILL
13258	LECT-DISC	F	1-5	TUWTHF	38	EDUC	STERN
13266	LECT-DISC	G	1-3	MTUWTHF	33	EDUC	HEMP
13274	LECT-DISC	H	8-11	TUWTHF	28	EDUC	WARMBROD
		H	1-5	TUWTHF	28	EDUC	

VOTEC 473 VOCATIONAL EDUCATION IN AGRICULTURE FOR ADULTS.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT
MEETS FIRST FOUR WEEKS

13282	LECT-DISC		8-10	TUWTHF	33	EDUC	FULLER

VOTEC 474 SUPERVISED AGRICULTURE IN VOCATIONAL AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT
MEETS FIRST FOUR WEEKS

13291	LECT-DISC	3-5	TUWTHF	33	EDUC	PHIPPS

VOTEC 476 GUIDANCE IN AGRICULTURAL EDUCATION.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT
MEETS FIRST FOUR WEEKS

13303	LECT-DISC	10-12	TUWTHF	33	EDUC	KREBS

VOTEC 481 HISTORY AND BASIC CONCEPTS OF VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

13311	LECT-DISC	9-11	TUWTHF	28	EDUC	CAMPBELL

VOTEC 482 RESEARCH STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT

13320	LECT-DISC	2	TUWTHF	27	EDUC	SCHILL

VOTEC 489 ADMINISTRATION AND SUPERVISION OF VOCATIONAL AND TECHNICAL
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
MEETS FIRST FOUR WEEKS.

13338	LECT-DISC	11-1	TUWTHF	28	EDUC	KARNES

VOTEC 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

13346	CONF	ARR	STAFF

VOTEC 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

13354	CONF	ARR	STAFF

VOTEC 499 THESIS RESEARCH.
0 TO 4 UNITS, SUMMER--0 TO 2 1/2 UNITS

13362	CONF	ARR	STAFF

ZOOLOGY

DEPARTMENT OFFICE 345 N H

MAJOR-BIOL. 110-111 AND TWENTY HOURS IN ZOOLOGY, EXCLUDING ZOOL. 101, 104, 106, 107, BIOL. 110, 111, 151, D G S 131 AND 132, AND BIOL. 101 AND 102 AT CHICAGO UNDERGRADUATE DIVISION. STUDENTS WHO HAVE CREDIT IN ZOOL. 104 MUST TAKE BOTANY 100 TO SATISFY THE ELEMENTARY SEQUENCE REQUIREMENT. AT LEAST ONE COURSE MUST BE TAKEN IN EACH OF THE FOLLOWING AREA-GROUPS OF COURSES--

GENETICS AND DEVELOPMENT--ZOOL. 210, 333, 367
CELLULAR AND PHYSIOLOGICAL ZOOLOGY--ZOOL. 301, 302, 312, 334
ECOLOGY AND BEHAVIOR--ZOOL. 342, 343, 345, 346, 369
MORPHOLOGY AND SYSTEMATICS--ZOOL. 132, 304, 305, 318, 320, 321, 324, 332, 335, 336, 337, 338, 340, 344

BIOL. 203, 204, 251, 351, AND ALL 200-, 300-, AND 400-LEVEL ZOOLOGY COURSES, EVEN IF NOT INCLUDED IN THE PRECEDING AREA LISTS, AUTOMATICALLY COUNT TOWARD THE TWENTY HOURS. ALSO REQUIRED ARE ONE YEAR OF PHYSICS, AT LEAST 3 SEMESTERS OF CHEMISTRY INCLUDING ORGANIC, AND MATHEMATICS THROUGH ANALYTIC GEOMETRY WITH CALCULUS HIGHLY RECOMMENDED. ALSO HIGHLY RECOMMENDED IS ONE COURSE IN GENERAL BOTANY, MICROBIOLOGY, OR GEOLOGY. THESE REQUIREMENTS ARE EFFECTIVE FOR ALL UNDERGRADUATE STUDENTS ENTERING THE UNIVERSITY AFTER SEPTEMBER 1963.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANIMAL SCIENCE, TO BE CHOSEN FROM COURSES 100, 110, 230, 305 OR 330, ANTHROPOLOGY, BOTANY, CHEMISTRY, EDUCATION, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHYSICS, PHYSIOLOGY, AND PSYCHOLOGY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 131 AND 132 OR BIOL. 151 AND 251 MAY BE SUBSTITUTED FOR ZOOL. 101 OR 104 WHEREVER EITHER OF THE LATTER CONSTITUTES A PREREQUISITE.

BIOL. 110 AND 111, OR BIOL. 151 AND 251 MAY BE SUBSTITUTED FOR ZOOL. 101 WHEREVER IT CONSTITUTES A PREREQUISITE. D G S 131 AND 132 OR ZOOL. 104 MAY BE SUBSTITUTED WITH THE INSTRUCTORS PERMISSION.

ZOOL 104 ELEMENTARY ZOOLOGY.
*CREDIT IS NOT GIVEN IN ZOOL. 104 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*STUDENTS WITH 90 OR MORE CREDIT HOURS RECEIVE ONLY 3 HOURS CREDIT.
*4 HOURS

13371	LECT		8	MTUWTH	158	ADMIN	SWEENEY AND
	LAB-DISC		9-12	MTUWTH	313	N H B	STAFF

COURSES FOR ADVANCED UNDERGRADUATES

ZOOL 210 GENETICS.
SAME AS BOT. 210.
PREREQUISITE--BOT. 100 AND ZOOL. 101 OR CONSENT OF INSTRUCTOR.
4 HOURS

13389	LECT		2	MTUWTHF	140	BUR HALL	BADER & STAFF
	LAB-DISC		3	MTUWTHF	102	H H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ZOOL 301 GENERAL PHYSIOLOGY.
SAME AS PHYSL. 301.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS, OR 1 UNIT

13397	LECT		8	MTUWTHF	140	BUR HALL	ANDERSON
13400	LAB	1	9-12	MTUW	523	BUR HALL	
13418	LAB	2	2-5	MTUW	523	BUR HALL	

ZOOL 303 INDIVIDUAL TOPICS.
PREREQUISITE--TWO YEARS OF ZOOLOGY, SENIOR STANDING, APPROVAL OF DEPARTMENT.
2 TO 5 HOURS, OR 1/2 OR 1 UNIT

13426	CONF		ARR				STAFF

ZOOL 304 FIELD AND SYSTEMATIC ZOOLOGY.
PREREQUISITE--ONE YEAR OF ZOOLOGY OR EQUIVALENT, SENIOR STANDING OR CONSENT OF INSTRUCTOR.
5 HOURS, OR 1 UNIT

13434	LECT		11	MTUWTH	247	N H B	MATTESON, HALL
	LAB		9-11	MTUWTH	420	N H B	

ZOOL 330 PRACTICAL MICROTECHNIQUE.
PREREQUISITE--HISTOLOGY OR EMBRYOLOGY AND CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 UNIT

13442	LAB-DISC		8-11	MTUWTH	316	N H B	UNDERHILL & STAFF

ZOOL 340 NATURAL HISTORY OF THE VERTEBRATES.
PREREQUISITE--ONE YEAR OF BIOLOGY INCLUDING ZOOL. 101, CONSENT OF INSTRUCTOR.
5 HOURS, OR 1 UNIT

13451	LECT		1	MTUWTH	102C	VIVARIUM	SHOEMAKER AND
	LAB		1-5	F	102B	VIVARIUM	STAFF
			8-12	S	102B	VIVARIUM	

```
ZOOL  408     LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
              SAME AS AN. S. 408.
        PREREQUISITE--CONSENT OF INSTRUCTOR.
        1/2 TO 1 UNIT
      13469      LAB              ARR                                        NALBANDOV


ZOOL  499     THESIS RESEARCH.
        0 TO 4 UNITS, SUMMER -- 0 TO 2 UNITS
        ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF VERTEBRATES--
              VERTEBRATE ANATOMY                  BADER, SMITH
              ENDOCRINOLOGY                       HALL, NALBANDOV
              HISTOLOGY                           DAVENPORT
              ULTRASTRUCTURE                      HALL
              FUNCTIONAL ANATOMY                  FRAZZETTA
              VERTEBRATE PHYSIOLOGY               PROSSER
        ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF INVERTEBRATES--
              HELMINTHOLOGY                       KRUIDENIER, SILVERMAN
              INVERTEBRATE ZOOLOGY                MATTESON, SWEENEY
              INVERTEBRATE PSYSIOLOGY             PROSSER, SWEENEY
                                                 KRUIDENIER, SILVERMAN ALGER
              PROTOZOOLOGY                        SMALL
        EMBRYOLOGY AND BASIC KNOWLEDGE OF CELLS AND TISSUES--
              CYTOLOGY                            DAVENPORT
              EMBRYOLOGY AND REGENERATION         DAVENPORT, WATTERSON
                                                  FREEMAN
              TOXICOLOGY                          INGLE
        PRINCIPLES OF ECOLOGY, PRINCIPLES OF TAXONOMY, NATURAL HISTORY--
              ECOLOGY                             KENDEIGH
              ETHOLOGY                            BARLOW, BANKS
              HERPETOLOGY                         H SMITH
              ICHTHYOLOGY                         SHOEMAKER, P SMITH
              LIMNOLOGY                           MATTESON, BENNETT
              MAMMALOGY                           HOFFMEISTER, LEE
              ORNITHOLOGY                         KENDEIGH
              WILDLIFE MANAGEMENT                 KENDEIGH, SHOEMAKER
                                                  SANDERSON
         GENETICS, PHYLOGENY, EVOLUTION--
              GENETICS AND EVOLUTION              KITZMILLER, NANNEY, BROWN
              VERTEBRATE PHYLOGENY & PALEONTOLOGYBADER, FRAZZETTA
      13477      CONF             ARR                                        STAFF
```

TRIAL REGISTRATION FORM

Name.....
Last First Middle

Local Address.....

Telephone.....

Date.....

College.....

Curriculum.....

Class.....

Subject	Type	Course Number	Section	Credit	CALL Number	M	Tu	W	Th	F	S	Memo

TRIAL REGISTRATION FORM

Name.....
Last First Middle

Local
Address.....

Telephone.....

Date.....

College.....

Curriculum.....

Class.....

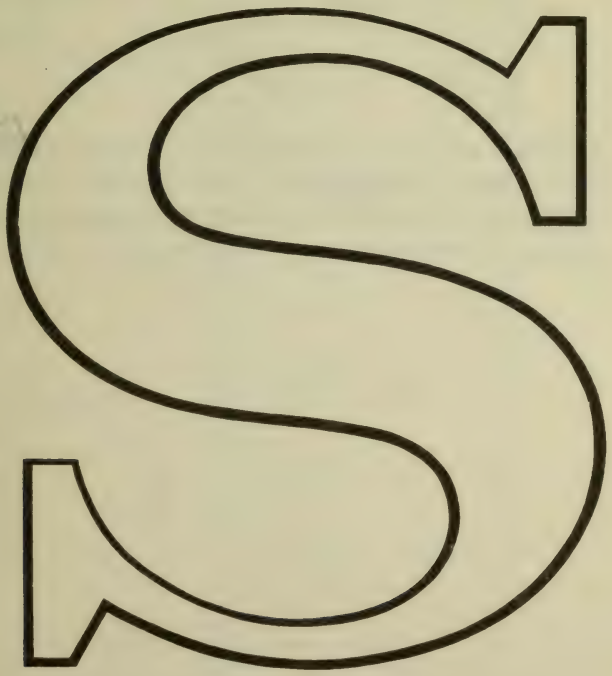
Subject	Type	Course Number	Section	Credit	CALL Number	M	Tu	W	Th	F	S	Memo

C
IZ s1Ia
1967

SUMMER · 1967

TIME TABLE

THE LIBRARY OF THE
FEB 28 1967
UNIVERSITY OF ILLINOIS



BULLETIN · UNIVERSITY OF ILLINOIS · URBANA DEPARTMENTS

SUMMER SESSION 1967

SUPPLEMENT INFORMATION ON PAGE 2

A supplement to the time table will be printed shortly before the summer session begins. Students and staff using the time table at the time of registration are advised to consult the supplement for possible changes. Copies are furnished to advisers and department offices.

UNIVERSITY OF ILLINOIS BULLETIN

Volume 64, Number 77; February 10, 1967. Published twelve times each month by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Office of Publication, 114 Altgeld Hall, Urbana, Illinois 61801.

CONTENTS

Calendar....4
General Information....6
Physical Examination....6
Admission and Readmission....7
Registration....9
Fees....10
Financial Aids....12
Final Examinations....12
Student Welfare....13
Room and Board....13
Illini Union....14
CIC Summer Programs....15
Listing of Courses....18
Accountancy....19
Advertising....20
Aeronautical and Astronautical Engineering....21
Agricultural Economics....22
Agricultural Engineering....23
Agriculture....24
Agronomy....24
American Civilization....25
Animal Science....26
Anthropology....27
Architecture....29
Art....30
Asian Studies....35
Astronomy....36
Aviation....36
Bands....39
Bengali....40
Biology....40
Biophysics....40
Botany....41
Business....42
Business Administration....42
Business Education....43
Business and Technical Writing....140
Ceramic Engineering....44
Chemical Engineering....47
Chemistry....44
Civil Engineering....47
Classics....49
Communications....49
Comparative Literature....50
Computer Science....50
Dairy Science....51
Dairy Technology....71
Dance....51
Division of General Studies....52
Economics....52
Educational Administration and Supervision....54
Educational Practice....56
Educational Psychology....56
Electrical Engineering....59
Elementary Education....62
Engineering....65
English....65
English as a Second Language....139
Entomology....69
Finance....70
Food Science....71
Forestry....72
French....72
General Education....75
General Engineering....76
Geography....77
Geology....79
Germanic Languages and Literatures....80
Greek....82
Health Education....83
Health Science....83
Hindi....84
History....84
History and Philosophy of Education....87
Home Economics....88
Horticulture....90
Humanities....91
Industrial Administration....91
Industrial Engineering....92
Italian....92
Journalism....93
Kashmiri....93
Labor and Industrial Relations....93
Landscape Architecture....94
Latin....94
Latin-American Studies....95
Law....96
Library Science....98
Linguistics....100
Marketing....101
Mathematics....102
Mechanical Engineering....108
Medieval Civilization Studies....109
Metallurgical Engineering....109
Microbiology....110
Military Science....111
Mining Engineering....113
Music....114
Nuclear Engineering....122
Persian....123
Philosophy....123
Physical Education....126
Physical Education for Men....125
Physical Education for Women....128
Physics....129
Physiology....130
Plant Pathology....131
Political Science....132
Portuguese....133
Psychology....134
Radio and Television....136
Recreation and Municipal Park Administration....137
Rhetoric and Composition....138
Rural Sociology....23
Russian....141
Russian Language and Area Studies....142
Safety Education....143
Sanskrit....144
Secondary and Continuing Education....144
Social Sciences....146
Sociology....146
Spanish....148
Special Education....150
Speech and Theatre....151
Tamil....154
Telugu....155
Theoretical and Applied Mechanics....155
Urban Planning....156
Urdu....157
Veterinary Medical Science....157
Veterinary Medicine....158
Vocational and Technical Education....158
Zoology....160

CALENDAR FOR EIGHT-WEEK SUMMER SESSION, 1967

May 25, Thurs.-May 26, Fri.....Registration for 1967 Summer Session off-campus courses, College of Law, and registration staff, including payment of tuition and fees.

June 5, Mon., 4:10 p.m.....Meeting of Urbana-Champaign Senate.

June 16, Fri., 5:00 p.m.....Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from College of Law first five and one-half week session.

June 19, Mon.....Earliest date for special examinations.

June 19, Mon.....Registration of Summer Session non-degree candidates, undergraduate students, continuous graduate students, and new and readmitted graduate students who have been issued permits to enter by Friday, June 2, except graduate institute participants.

June 20, Tues.....Registration for Summer Session institutes, graduate students not appearing at the appointed time on Monday, June 19, and new and readmitted graduate students issued permits after Friday, June 2.

June 20, Tues., 7:00 a.m.....Instruction begins.

June 20, Tues., 6:45 to 10:00 p.m..Qualifying examination in English (for transfer students with eighty or more credit hours only).

June 22, Thurs., 5:00 p.m.....Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from College of Law eleven-week term.

June 26, Mon., 5:00 p.m.....Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range, except in College of Law.

June 28, Wed., 5:00 p.m.....Latest date for refund of one-half tuition and fees (except nonrefundable portion) if withdrawing from College of Law first five and one-half week session.

July 4, Tues.....Independence Day (holiday).

July 13, Thurs., 6:45 to 10:00 p.m..Qualifying examination in English.

July 17, Mon.....Beginning of second four-week courses.

July 18, Tues., 5:00 p.m.....Latest date for refund of one-half tuition and fees (except nonrefundable portion) if withdrawing from the University or reducing program range, except in College of Law.

July 19, Wed.....Earliest date for one-half credit if withdrawing from the University for military service (four weeks' instruction completed), except in College of Law.

July 24, Mon., 5:00 p.m.....Latest date for refund of one-half of tuition and fees (except nonrefundable portion) if withdrawing from College of Law eleven-week term.

July 25, Tues., 5:00 p.m.....Latest date for full refund of tuition and fees (except nonrefundable portion) if withdrawing from College of Law second five and one-half week session.

July 27, Thurs. . . . . Latest date to withdraw from the University without petitioning for readmission.

July 31, Mon. . . . . Latest date for special examinations.

Aug. 2, Wed. . . . . Latest date for foreign students who have not attended a college or university in the United States to apply for admission in September, 1967.

Aug. 2, Wed. . . . . Earliest date for full credit if withdrawing from the University for military service (six weeks' instruction completed), except in College of Law.

Aug. 4, Fri., 5:00 p.m. . . . . Latest date for refund of one-half of tuition and fees (except nonrefundable portion) if withdrawing from College of Law second five and one-half week session.

Aug. 10, Thurs. . . . . Last day of instruction.

Aug. 11, Fri.-Aug. 12, Sat. . . . . Summer Session final examinations.

Aug. 14, Mon.-Sept. 9, Sat. . . . . Corps of Engineers post-Summer Session courses (four weeks).

Aug. 15, Tues. . . . . August graduation date (no Commencement Exercises).

Aug. 23, Wed. . . . . Earliest date for special examinations.

Aug. 30, Wed. . . . . Latest date for domestic students, or foreign students who have attended a college or university in the United States, to apply for admission or readmission in September, 1967.

GENERAL INFORMATION

To serve those who desire to pursue summer study, the University of Illinois at Urbana is offering a comprehensive schedule of courses of eight weeks' duration, June 19 to August 12, 1967. All colleges on the Urbana campus are included in the summer program. The College of Law offers two five and one-half week sessions, from June 12 to July 19 and from July 20 to August 26. A few departments offer special intensive courses lasting only four to six weeks.

The University of Illinois Chicago Circle campus is offering a summer quarter from June 19 to September 1, 1967.

Courses in the eight-week summer session at Urbana-Champaign are selected to meet the needs of school teachers and administrators, librarians, athletic coaches, and others whose employment prevents attendance during the regular school year, as well as graduate students pursuing work leading to advanced degrees, undergraduate students at the University of Illinois or elsewhere who wish to accelerate their programs of study, and other persons for whom summer study will contribute to vocational or personal goals. The needs of teachers are met not only in the courses, institutes, and workshops in the Graduate College and the College of Education, but also in a variety of courses elsewhere in the University.

Undergraduate and graduate students interested in taking independent study courses (reading and research) should confer with the head of the department concerned.

The resources of the University are open to students throughout the summer. They may take advantage of the extensive facilities of the University Library, the largest in any state university and third among all American universities, with more than 5,676,300 books, films, pamphlets, music scores and parts, maps, manuscripts, and more than 55,000 serial titles, including periodicals and newspapers. They may profit from the museums, collections, shops, and laboratories. There are cultural and recreational opportunities — lectures, readings, concerts, theatre productions, dances, and social events.

General information concerning admission, registration procedures, fees, and board and room is given on the following pages. The courses offered in the eight-week summer session are listed alphabetically beginning on page 19.

The final date on which any student may withdraw from a course without accepting a grade of "E" in advance is determined by the dean of his college. For undergraduate students registered as non-degree candidates in the Summer Session, this date is July 24, 1967.

PHYSICAL EXAMINATION

All new students proposing to enroll in the University of Illinois at Urbana-Champaign for a full semester are required, before completion of their first registration, to present adequate evidence of satisfactory physical and mental health as determined by the Director of Health Services.

The pre-entrance examination, except for foreign students, may be performed at the student's expense by a properly qualified doctor of medicine of his choice or by the Health Service free of charge until fifteen days prior to the registration date for the particular semester. It must be performed within the six-month period immediately preceding the registration date and is subject to final evaluation and approval by the Director of Health Services. Detailed explanatory material and medical forms for reporting the pre-entrance examination are forwarded to each student who receives a permit to enter in a fall or spring semester.

New students, except for foreign students, enrolling in the summer session are required to take the tuberculin test administered without charge by the Health Service as part of the registration procedure, but are not required to take the complete physical examination until such time as they enroll for a full semester. The tuberculin test is also administered during registration to all readmitted students who have been absent for a semester or more.

Anyone who has had a normal chest film within the past six months, and presents evidence thereof, is excused from the tuberculin test. Military personnel on active status are exempted from the tuberculin test; teachers presenting an x-ray report from their local public health department, dated within the previous six months, which declares them to be free from tuberculosis, are also exempted

from the tuberculin test. Students with previous history of a positive tuberculin test are given a chest x-ray at the Health Service instead of the tuberculin skin test.

All high school and elementary school students coming to the campus for periods exceeding ten days are required to pass a physical examination, but are not required to take the tuberculin test.

In any particular situation where it is deemed advisable by the Health Service for public health reasons, the physical examination and tuberculin test may be required. All foreign students must pass a physical examination administered by the University Health Service before receiving a permit to register in any session, and all students who have lived abroad for an academic year or its equivalent are required to have a complete physical examination when returning to reregister in the University.

ADMISSION AND READMISSION

Applications for admission of new freshman and transfer students and for readmission of former students in the Summer Session will be accepted on or after March 1.

Because existing facilities are inadequate to accommodate all qualified applicants for admission and readmission in the fall and spring semesters, acceptance in the Summer Session does not guarantee approval for continuation in a college in a following semester. A separate application for admission in September or February must be submitted.

Admission and Readmission as Candidates for Degrees

All students, *graduate and undergraduate,* not previously enrolled at the University of Illinois, who are planning to register for the first time this summer, should submit applications for admission and complete credentials to the Director of Admissions and Records well in advance of June 19, 1967. Application blanks may be obtained by writing to the Office of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61801.

Candidates for advanced degrees who were registered in the Graduate College for resident study in the 1966 summer session or in the first or second semester of 1966-67, or in extramural courses as degree candidates in either the fall or spring semester of 1966-67 *need not apply for readmission to the 1967 summer session.*

Other former graduate students, and all former undergraduate students not in attendance the second semester of 1966-67, who expect to return this summer, should file applications for readmission well in advance of registration in order to allow ample time for preparation of registration materials. This will facilitate the entire procedure for each student concerned and avoid unnecessary delay in completing his registration. New and readmitted graduate students whose applications are not received in time to be processed by Friday, June 2, will be required to postpone their registration until Tuesday, June 20.

Applicants for readmission who have not notified the Director of Admissions and Records in advance of registration day of their intentions to re-enter, and new students who have not received a permit to enter, should go first to the Office of Admissions and Records, 100a Administration Building. Undergraduate students report to Windows 8, 12, or 14; graduate students report to Windows 20 or 21. *They may go there at any time without respect to the alphabetical order of registration on page 9.*

Former students are considered for readmission to the college in which they were previously enrolled, if in good standing at the last attendance, unless they request transfer to the Summer Session with non-degree status. In such cases, they must obtain releases from their former colleges. Former students not in good standing must petition for readmission to the University in their former colleges, another college, or the Summer Session.

For additional information on any matter pertaining to admission or readmission, write to the Director of Admissions and Records, University of Illinois, 100a Administration Building, Urbana, Illinois 61801.

Admission of New Undergraduate Students as Candidates for Degrees

Applications for admission to a college in the 1967 summer session from new undergraduate students, *as candidates for degrees,* will be considered only if ap-

plicants have previously applied and been approved for admission to a college in the fall, and have paid the required $30.00 advance deposit on their fall semester tuition and fees. This deposit is not applicable on their summer session tuition and fees. Such students will be admitted directly to the college and curriculum of their choice. Consult the Undergraduate Study catalog for information concerning requirements for admission to the various curricula.

All applications from beginning freshmen for admission to the University as candidates for degrees are considered on the basis of a combination of high school rank and scores on prescribed admission tests, and distribution of academic subjects prescribed for the chosen curriculum. (Either the ACT or the SAT of the CEEB have been approved for admission testing purposes, but those presenting SAT scores still must submit ACT scores no later than fifteen days following registration.)

Nonresident freshmen must rank at least in the top quarter of their high school graduating class, and nonresident transfers must present a cumulative scholastic average of at least 3.25 in terms of the University of Illinois grading system.

Admission and Readmission as Non-Degree Candidates

Applications of *undergraduate* students for admission or readmission to the Summer Session, not as candidates for degrees, should be submitted to the Office of Admissions and Records well in advance of registration day. They may be approved by the Director of Admissions and Records or the Summer Session Office for enrollment in the Summer Session under one of the following conditions:

1. High school graduates who qualify for admission under minimum admission requirements, but who have not been admitted for the fall semester, may be admitted to the Summer Session only as non-degree candidates. Minimum requirements for residents of Illinois include rank in the top half of their graduating class or test scores at a level which compensates for the lower rank. Nonresident applicants must rank at least in the top quarter of their class. (Students who have received permits to enter in September and who wish to enroll in the summer will register in their colleges at the beginning of the summer session.)
2. Former University of Illinois students who have not graduated from the University may register as non-degree candidates if they secure a release from the college at the University of Illinois in which they were last enrolled, and if such enrollment is approved by the Director of Admissions and Records or by the Summer Session Office.
3. Undergraduate students enrolled in other institutions may enroll in the Summer Session as non-degree candidates if they present a statement of eligibility to return to the collegiate institution last attended.
4. Persons employed as teachers who submit statements from the school authorities attesting to their employment may enroll in the Summer Session as non-degree candidates.
5. Other persons, twenty-one years of age or over, who have never attended a collegiate institution but give evidence that they possess the requisite background and ability to pursue profitably courses for which they are qualified, may enroll in the Summer Session as non-degree candidates.

Students on drop or probationary status must petition the Summer Session Office for admission as non-degree candidates. If approved, they will be admitted on probation for the 1967 summer session only.

Approval of admission or readmission as a non-degree candidate in the Summer Session in no way affects a student's future standing in a college, and satisfactory performance is no assurance of approval for continuation in the fall or at any future time. Students admitted to the Summer Session as non-degree candidates who later wish to enter one of the colleges of the University as degree candidates must seek admission in the usual manner and satisfy requirements in effect at the time of application.

All students holding a bachelor's degree must enroll in the Graduate College.

REGISTRATION

All students, new and readmitted, must present Social Security numbers, which will become their permanent identification numbers. Any student who does not have such a number should obtain one from his local Social Security Office before coming to the campus.

Eight-Week Courses

Monday, June 19, through Saturday, August 12, 1967

No course may be taken for graduate credit unless it is so designated in this time table of courses offered. The normal credit which a graduate student can earn in eight weeks is two units. In exceptional cases, two and one-half units may be carried with the approval of the adviser. Under no circumstances is a graduate student permitted to carry more than two and one-half units.

The normal full-time registration for an undergraduate student in the eight-week summer session is eight semester hours. More or less than a normal program is permitted only by authority of the dean of the student's college.

Further information concerning the regulations for advanced degrees is contained in the catalog of the Graduate College, copies of which may be obtained by writing to the Office of Admissions and Records, 100a Administration Building, or to the Graduate College, 330 Administration Building.

ORDER OF REGISTRATION

Monday, June 19, and Tuesday, June 20, 1967

Monday, June 19

Summer Session non-degree candidates, undergraduate students, new and readmitted graduate students who have been issued permits to enter the University by Friday, June 2, and continuous graduate students, except graduate summer institute participants, register on this day.

Tuesday, June 20

Participants in the graduate summer institutes, graduate students not appearing at the appointed hour on Monday, June 19, and new and readmitted graduate students issued permits to enter the University after Friday, June 2, register on this day.

Graduate Students

The program request card and other preliminary registration materials may be obtained in advance of registration days at the department offices on or after Tuesday, June 13. After the preliminary materials have been completed in consultation with the adviser, authorization cards for completion of registration will be distributed in the English Building (enter northwest door), in accordance with the alphabetical schedule below.

Undergraduate Students

Both new and former Summer Session students not assigned to a college will receive registration forms in 172 Armory on Monday, June 19, and in 349 Administration Building after June 19; other undergraduate students will receive registration materials at the offices of the deans of their colleges.

Graduate and Undergraduate Students

Authorization cards to complete registration will be released to those scheduled to register on each of the registration days (June 19 and June 20) in accordance with the following alphabetical schedule, *but not before.*

A through B	3:00 p.m.	Las through M	10:00 a.m.
C through E	4:00 p.m.	N through Ro	11:00 a.m.
F through He	8:00 a.m.	Rp through Ta	1:00 p.m.
Hf through Lar	9:00 a.m.	Tb through Z	2:00 p.m.

Graduate students authorized to register on Monday, June 19, who do not appear at the appointed time, will be required to defer registration until Tuesday, June 20.

Graduate and undergraduate registrations are completed in the Armory through Tuesday, June 20. After June 20, authorization cards are distributed

from the college offices and registrations are completed in the Administration Building. Any registration, except for registrations in second four-week courses only, completed after 5:00 p.m. on Tuesday, June 20, 1967, will be considered a late registration, and the student will be subject to a late registration fine of $15.00. After Monday, July 17, the late registration fine will be assessed students completing registrations in second four-week courses only.

Second Four-Week Courses

Monday, July 17, through Saturday, August 12, 1967

Students wishing to register only in courses offered in the second four weeks of the eight-week summer session should complete their registration on or before Monday, July 17, 1967. The late registration fine of $15.00 is assessed all students registering in these courses after July 17, 1967.

Directory of Registration Offices

Admissions and Records:

Graduates and Undergraduates.....100a Administration Building
Agriculture, College of.....104 Mumford Hall
Aviation, Institute of.....318 Engineering Hall
Commerce and Business Administration, College of.....215a David Kinley Hall
Education, College of.....110 Education Building
Engineering, College of.....119 Engineering Hall
Fine and Applied Arts, College of.....110 Architecture Building
Graduate College.....321 Administration Building
Journalism and Communications, College of.....119 Gregory Hall
Law, College of.....209 Law Building
Liberal Arts and Sciences, College of.....294 Lincoln Hall
Physical Education, College of.....107 Huff Gymnasium
Summer Session.....349 Administration Building
Veterinary Medicine, College of.....135 Veterinary Medicine Building

FEES

All fees are due and payable in full at the time of registration unless the Installment Plan is elected. An additional charge of $2.00 is made for this service. Arrangement for installment payment should be made at Station 5 in the Armory during the regular registration period. After June 20, arrangements should be made at the Business Office, 100b Administration Building.

During the registration period, applications for exemption from the University insurance should be presented at Station 3A in the Armory prior to request for tuition or fee adjustment or payment. After registration days, applications for exemption should be presented at the University Insurance Office, 208 Administration Building.

The fees at the Urbana-Champaign campus are as follows:

Eight-Week Summer Session

	Full Program		Partial Programs			
	Range I		Range II		Range III	
	Above 5 hours Above 1¼ units		Above 2½ to 5 hours Above ¾ to 1¼ units		Above 0 to 2½ hours Above 0 to ¾ unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
Tuition (except those holding exemptions)	$45.00	$190.00	$30.00	$130.00	$20.00	$80.00
Service Fee[1]	20.00	20.00	15.00	15.00	5.00	5.00
Hospital-Medical-Surgical Insurance Fee[2, 3]	10.00	10.00	10.00	10.00	10.00	10.00
Total	$75.00	$220.00	$55.00	$155.00	$35.00	$95.00

[1] Persons on appointment for at least 25 per cent of full-time service on the academic, administrative, or permanent nonacademic staff of the University, or on the staffs of allied agencies, and persons registered *in absentia* or in courses conducted off campus are exempt from the Service Fee.

[2] Students presenting evidence of equivalent coverage may receive a waiver of this fee upon approval of a petition submitted to the University Insurance Office not later than the final date established for full refund of fees. A signed waiver and assumption of responsibility is also required. Persons registered for thesis research *in absentia* are not assessed this fee.

[3] If insurance coverage for the period between the close of the summer session and the beginning of the first semester is not desired, $5.00 will be refunded if requested in writing prior to the final date established for full refund of fees.

Twelve-Week Summer Term (Institutes) and Eleven-Week College of Law Summer Program

	Full Program		Partial Programs			
	Range I		Range II		Range III	
	Above 8 hours Above 2 units		Above 4 to 8 hours Above 1 to 2 units		Above 0 to 4 hours Above 0 to 1 unit	
	Resident	*Non-resident*	*Resident*	*Non-resident*	*Resident*	*Non-resident*
Tuition (except those holding exemptions)	$65.00	$250.00	$45.00	$175.00	$25.00	$90.00
Service Fee[1]	30.00	30.00	20.00	20.00	10.00	10.00
Hospital-Medical-Surgical Insurance Fee[2]	10.00	10.00	10.00	10.00	10.00	10.00
Total	$105.00	$290.00	$75.00	$205.00	$45.00	$110.00

[1] Persons on appointment for at least 25 per cent of full-time service on the academic, administrative, or permanent nonacademic staff of the University, or on the staffs of allied agencies, and persons registered *in absentia* or in courses conducted off campus are exempt from the Service Fee.

[2] Students presenting evidence of equivalent coverage may receive a waiver of this fee upon approval of a petition submitted to the University Insurance Office not later than the final date established for full refund of fees. A signed waiver and assumption of responsibility is also required. Persons registered for thesis research *in absentia* are not assessed this fee.

Students registered in *either one* of the five and one-half week College of Law summer sessions pay one-half of the Tuition and Service Fee established for the twelve-week term, rounded to the next higher even dollar. They are also subject to the same Hospital-Medical-Surgical Insurance Fee applying to registrants in the eight-week summer session.

Registration in Noncredit Courses

Students (except those holding exemptions) who register in noncredit courses pay tuition and fees as follows:

1. Persons who register in the summer session *on campus* for doctoral thesis research (499) only, without credit, are charged the following:
   Tuition $10.00
   Service Fee 5.00
   Hospital-Medical-Surgical Insurance Fee 10.00
2. Persons who register for doctoral thesis research (499) *in absentia* without credit or for Engineering 102 are charged only a tuition fee of. $10.00
   (Those registered *in absentia* for credit pay the regular tuition, resident or nonresident, as applicable.)
3. Persons who register in noncredit seminars, either alone or in addition to other courses ..... *No charge*
   (Regular tuition and fees which are applicable are assessed for other courses taken concurrently.)
4. Persons who register in noncredit courses only, other than thesis research and seminar, are assigned to Range III.
5. University employees who register at the request of their department in noncredit courses especially established to improve the work of the employee ..... *No charge*
   (Regular tuition and fees which are applicable are assessed for other courses taken concurrently.)
6. Persons wishing to attend a campus course as a visitor only (special permit required) pay for each course a fee of $15.00

The above list of fees includes only those that are generally applicable to all students at Urbana. Complete information concerning fees applicable only in special cases (as change of program after registration, flight instruction fee, etc.) and fee exemption regulations are contained in the University's Undergraduate Study and the Graduate College catalogs, and the current edition of *Regulations Applying to All Undergraduate Students,* or may be obtained in 69 Administration Building.

FINANCIAL AIDS

Limited amounts of scholarship and loan funds are available for students attending the University in the summer. For detailed information about scholarships, write to the Director of the Undergraduate Scholarship Program, 707 South Sixth Street, Champaign, Illinois 61820. Application blanks and information about loan funds at the University of Illinois in Urbana may be obtained from the office of the Bursar, 100b Administration Building, Urbana 61801, or the offices of the Dean of Men, 110 Student Services Building, or the Dean of Women, 130 Student Services Building, Champaign, Illinois 61820. Information concerning National Defense Education Act loan funds may be obtained from the office of the Dean of Students, 310 Student Services Building, Champaign 61820.

FINAL EXAMINATIONS

Eight-Week Courses

Friday, August 11, and Saturday, August 12, 1967

Final examinations must be given at the times specified unless a change is approved in advance by the Provost. Requests for change should be submitted through the executive officer of the department in which the course is offered. Only the dean of the student's college may approve deferment of the examination in individual cases of undergraduate students.

The examinations for classes meeting four, five, or six times a week are *two hours* in length; those for classes meeting one, two, or three times a week are *one hour* in length. Where it is desired to give a two-hour examination in a course regularly scheduled for a one-hour examination, the time for the examination should be arranged by the instructor at any hour on either of the examination days that will avoid conflicts.

Examinations for courses meeting only once a week for one or more hours, and for courses meeting at 12:00 noon or after 4:00 p.m., should be arranged by the instructor at any hour within the examination period (August 11 and 12) that will avoid conflicts.

For courses meeting two to six times a week, the schedule of examinations is as follows:

Seven o'clock Classes

Meeting four, five, or six days a week.....Friday, 7:00- 9:00 p.m.
Meeting MWF, or any two of those days.....Friday, 7:00- 8:00 p.m.
Meeting TTS, or any two of those days.....Friday, 8:00- 9:00 p.m.

Eight o'clock Classes

Meeting four, five, or six days a week.....Saturday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Saturday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 9:00-10:00 a.m.

Nine o'clock Classes

Meeting four, five, or six days a week.....Saturday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Saturday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Saturday, 11:00-12:00 noon

Ten o'clock Classes

Meeting four, five, or six days a week.....Saturday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 2:00- 3:00 p.m.

Eleven o'clock Classes

Meeting four, five, or six days a week.....Friday, 8:00-10:00 a.m.
Meeting MWF, or any two of those days.....Friday, 8:00- 9:00 a.m.
Meeting TTS, or any two of those days.....Friday, 9:00-10:00 a.m.

One o'clock Classes

Meeting four, five, or six days a week.....Friday, 1:00- 3:00 p.m.
Meeting MWF, or any two of those days.....Friday, 1:00- 2:00 p.m.
Meeting TTS, or any two of those days.....Friday, 2:00- 3:00 p.m.

Two o'clock Classes

Meeting four, five, or six days a week.....Friday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Friday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Friday, 4:00- 5:00 p.m.

Three o'clock Classes

Meeting four, five, or six days a week.....Saturday, 3:00- 5:00 p.m.
Meeting MWF, or any two of those days.....Saturday, 3:00- 4:00 p.m.
Meeting TTS, or any two of those days.....Saturday, 4:00- 5:00 p.m.

Four o'clock Classes

Meeting four, five, or six days a week.....Friday, 10:00-12:00 noon
Meeting MWF, or any two of those days.....Friday, 10:00-11:00 a.m.
Meeting TTS, or any two of those days.....Friday, 11:00-12:00 noon

Note: For a course so scheduled that the final examination may be given in more than one period, the earliest time in the examination schedule must be chosen. For example, for a course regularly meeting from 1:00 to 3:00 p.m. on Monday, Wednesday, and Friday, or any two of those days, the examination should be scheduled for Friday, 1:00 to 2:00 p.m., not Friday, 3:00 to 4:00 p.m.

Students in courses regularly meeting on a half-hour schedule, e.g., 10:30 a.m. to 12:00 noon on Monday, Tuesday, Thursday, and Friday, should be given the examination according to the full hour sequence in which they fall, i.e, 11:00 a.m. to 12:00 noon, with the final examination scheduled from 8:00 to 10:00 a.m. on Friday.

Multiple instructional courses including at least two lectures per week at the same hour must schedule the final examination according to the sequence in which the lectures occur, irrespective of the times of discussion or laboratory periods.

STUDENT WELFARE

The University makes every effort to provide the most favorable conditions for the life of the student while he is living in the community. The Dean of Students coordinates and unifies the work of the agencies interested in the student's well-being and gives advice and guidance on problems outside the classroom. Advisers and members of the academic faculty assist students in arranging programs of study and advise them relative to their classroom work. Aptitude testing and counseling services are provided by the Student Counseling Service.

The University Health Service for students, located in McKinley Hospital, 1109 South Lincoln Avenue, Urbana, Illinois, is maintained to promote physical and mental health, to control communicable diseases, and to teach the essentials of healthful living. McKinley Hospital serves both students and faculty.

The office of the Dean of Students maintains an employment service for students who desire part-time employment while attending the University. No charge is made for this service.

The offices of the Dean of Students, Student Employment, and the Student Counseling Service are located in the Student Services Building, 610 East John Street, Champaign, Illinois 61820.

ROOM AND BOARD

During the eight-week summer session, housing and food service accommodations in University residence halls will be available in the Florida Avenue Residence Halls. All facilities other than the living units are operated on a coeducational basis with dining, lounge, recreation, library, and office facilities being shared by the men and women residents. All shared facilities and student rooms are air conditioned. Room and board rates for the entire eight-week session are approximately as follows:

	20 Meals per Week	*15 Meals per Week*
Single Room	$234.00	$209.00
Double Room	214.00	189.00

Arrangements may also be made for rooms without board in one of the other residence halls. Rates for the entire eight-week session are as follows:

Single Room	$104.00 to $114.00
Double Room	84.00 to 94.00

Certain other facilities may become available. All prices quoted are subject to change.

Some space in other residence halls is available for the use of persons attending University-sponsored short courses or conferences during the summer period. The charge for housing accommodations is $3.15 to $4.40 a person per night and the daily charge for meals is $3.75. For information on this type of housing, write to the Conference Coordinator, 420 Student Services Building, Champaign, Illinois 61820.

Applications for residence may be obtained from the Housing Division, 420 Student Services Building.

Rooms, and in some cases, room and board, are also available at privately-operated housing units near the campus. Facilities in housing of this type are listed in the Housing Division Office. Room lists and additional information may be obtained by writing the Housing Division.

ILLINI UNION

The Illini Union is the community center for the students, faculty, staff, and alumni on the Urbana campus of the University of Illinois. In conjunction with other student organizations, the Illini Union sponsors a broad program of social, cultural, and recreational activities for the students. Among its many facilities are various food service units consisting of a cafeteria, snack bar, dining room, and several banquet rooms. The various lounges are meeting places for students and faculty between classes and at other free times. The Browsing Room contains the latest fiction, biography, and other books for general reading as well as a record-lending library. The Illini Union also houses the Book Center, a bookstore which offers high quality paperback editions of American and foreign publications, hard cover University of Illinois Press publications, and some periodicals of limited circulation.

Programs of recorded classical music are held under the direction of a student committee. Recreational facilities include bowling, billiard tables, television, and rooms for games. Dances are scheduled during the week. All students are entitled to the full use of the facilities of the Illini Union.

The Illini Union also sponsors a movie program consisting of evening presentations of popular and foreign films at a nominal charge.

ADDITIONAL INFORMATION

For additional information concerning attendance in the summer session at the University of Illinois, write to:

Director of Admissions and Records
University of Illinois
100a Administration Building
Urbana, Illinois 61801

CIC SUMMER PROGRAMS

THE CIC SUMMER PROGRAM IN SOUTH ASIAN STUDIES AT THE UNIVERSITY OF ILLINOIS

June 20 through August 25, 1967

The Committee on Institutional Cooperation (CIC), consisting of the universities of "The Big Ten," plus the University of Chicago, offers the Inter-University Rotating Summer Program in South Asian Studies at the University of Illinois Urbana Campus during the summer of 1967. The program is being administered by the Center for Asian Studies and the Department of Linguistics, and is open to all qualified students from CIC and non-CIC schools. Offerings include intensive language courses at elementary, intermediate, and advanced levels, as well as area courses in a variety of disciplines.

The faculty will include specialists in South Asian studies from CIC and other universities, here and abroad.

A limited number of scholarships and fellowships, including postgraduate grants and N.D.F.L. (N.D.E.A. Title VI) awards for graduates and undergraduates will be available for students who show high competence.

The following list of courses in the program is being offered:

AREA COURSES
(Eight Weeks)
(June 20 through August 11)

Anthropology 315, 368
Art 329
Comparative Literature 361
English 392
History 387, 388, 389
Linguistics 303, 351, 391, 392, 416
Music 317
Philosophy 361, 375
Political Science 349, 447
Sociology 340, 440

LANGUAGE COURSES
(Ten Weeks)
(June 20 through August 25)

Bengali 207, 307, 309
Hindi 207, 307, 309, 310
Kashmiri 207
Persian 207
Sanskrit 207, 307, 309
Tamil 307, 309
Telugu 207, 307, 309
Urdu 207, 307, 309

All students enrolling in a full program (eight semester hours or two graduate units, or more) in South Asian Studies will pay the University of Illinois resident tuition and fees. These total $105.00 for those students registering in language courses only or in a combination of language and area courses, and $75.00 for those students registering in area courses only. A special schedule of charges applies to students registering in less than a full program.

Registration will be on June 20, 1967, and classes will begin the same day.

Students desiring further information concerning courses or forms for financial aid should contact the Academic Director, Dr. Braj B. Kachru, Department of Linguistics, 309 Davenport Hall, University of Illinois, Urbana, Illinois 61801.

THE CIC FAR EASTERN LANGUAGE INSTITUTE AT THE UNIVERSITY OF MICHIGAN

June 12 through August 11, 1967

Also in cooperation with member institutions, the Committee on Institutional Cooperation (CIC) offers the fifth rotating Far Eastern Language Institute at the University of Michigan during the summer of 1967.

For qualified University of Illinois undergraduate students who participate in this program, the courses will be exactly as though taken at this University. That is, they will count toward the degree and they will count as residence credit.

The faculty will be drawn from the Chinese and Japanese teaching staffs of the CIC institutions, to whom specialists from universities outside the Big Eleven will be added.

A limited number of grants for scholarships and fellowships will be available for students who show high competence.

During the summer of 1967, intensive courses will be offered in elementary, intermediate, and advanced Chinese and Japanese at the undergraduate and graduate level. University of Illinois graduate students who participate in the program may petition for credit in the usual way if the work taken is at the graduate level.

Students desiring further information concerning these courses or forms of financial aid connected with the program should see Director Solomon B. Levine, 1207 West Oregon Street, Urbana, Illinois 61801.

Undergraduate and graduate participants in the CIC Far Eastern Language Institute register and pay their tuition and fees at the host institution. Special all-inclusive tuition fees for the CIC Institute will be $87.00 for undergraduate students and $95.00 for graduate students. Room and board will be available in University of Michigan dormitories for unmarried students at a total cost of $260.00 for nine weeks' occupancy in double rooms. Some University of Michigan low-cost student apartments will be available to married students.

Application deadlines for both admission and for financial aid are February 1, 1967, for graduate students, and March 1, 1967, for undergraduate students.

UNIQUE PROGRAMS AT CIC INSTITUTIONS

Summer 1967

In addition to the rotating institutes described above, the following unique programs are offered by the cooperating institutions. Interested persons are advised to write to the Dean or Director of the respective institution for complete official information. Courses designated "Graduate" are open only to graduate students. Those not so restricted are open to both undergraduate and graduate students.

UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS

Library Science 450. Advanced Study in Librarianship. Graduate level. Prerequisites. This course deals with the new Anglo-American Code of Cataloging. July 17 to August 12, 1967. Seymour Lubetsky.

Inter-University Rotating Summer Program in South Asian Studies (in cooperation with CIC institutions). Courses in area studies and in eight Indian languages. Brochures available at CIC institutions. June 20 to August 25, 1967.

INDIANA UNIVERSITY, BLOOMINGTON, INDIANA

Folklore Institute. Several courses dealing with American, French, and Celtic folklore. June 21 to August 10, 1967.

Information Systems Design L744. Systems analysis applied to libraries and information systems; conversion design; evaluation of results. Graduate. June 21 to August 10, 1967. C. D. Gull.

Geometric Optics, I. Optics of lenses, prisms, and mirrors. Emphasis on applications in visual science. Trigonometry essential. Undergraduate. June 21 to August 10, 1967. Gordon G. Heath.

Elementary Mongolian (Intensive). 12 credits.

Advanced Mongolian. 9 credits.

Introduction to Uzbek. 6 credits. Intensive study of languages of Central Asia. June 21 to August 10, 1967.

UNIVERSITY OF IOWA, IOWA CITY, IOWA

Translation Workshop 8:488. A course for those interested in the translation of foreign texts into English of high literary merit. Graduate. June 14 to August 9, 1967. Paul Engle, Clark W. Ansley, Peter Clothier.

Great Books of China and India 39:163. Advanced course for serious students of religion and philosophy. Book reports and term paper. No prerequisite. June 14 to August 9, 1967. Y. P. Mei.

The Genius of American Religious Institutions. A delineation of outstanding characteristics of the contemporary religious scene in the United States. June 14 to August 9, 1967. Sidney E. Mead.

Iowa Summer Pastoral Care Institute 32:255. Emphasis is on pastoral relationships with patients to help clergymen gain insights and skills which will make their ministry more meaningful. June 5 to July 14, 1967. David Belgum.

Iowa Lakeside Laboratory. Course offerings in field, biology, helminthology, morphology of algae, aquatic ecology, field entomology, etc. June 14 to July 14 and July 17 to August 9, 1967.

MICHIGAN STATE UNIVERSITY, EAST LANSING, MICHIGAN

Summer Institute of Glaciological Sciences. Juneau Ice Field, Alaska. Intensive study in arctic sciences; geomorphology, glaciology, snow physics, geological mapping, arctic botany. July 15 to September 1, 1967. Graduate and advanced undergraduates. Maynard Miller.

W. K. Kellogg Biological Station, Gull Lake, Michigan. Instruction in microbiology, botany, entomology, parasitology, zoology, and geography. June 17 to August 26, 1967. George H. Lauff, Robert Wetyel, Allen Knight, Donald McNaught.

UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINNESOTA

Public Health 231-232. Groundwater Development with Field Work. Development of groundwater sources for public water supplies. Graduate. June 12 to August 18, 1967. Richard G. Bond, Rexford D. Singer.

Public Health 138. Hospital Engineering Problems. Application of environmental engineering, sanitation, and maintenance principles and techniques relative to planning, administration, and operation of hospitals. Graduate. July 17 to August 18, 1967. Richard G. Bond.

Lake Itasca Biology Session. A variety of courses designed to make use of ecological area with prairies, hardwoods, and coniferous habitats, as well as aquatic habitats. June 12 to August 19, 1967.

Music 60. A program for high school musicians, high school teachers, and music students. Instruction by Minneapolis Symphony Orchestra personnel. Theory, literature, and performance.

NORTHWESTERN UNIVERSITY, EVANSTON, ILLINOIS

Summer Institute in Transportation. Designed to provide insights into social, economic, and technological forces affecting transportation in modern society. Courses in transportation, development, engineering, economic theory, location and regional analysis, and geography. June 26 to August 19, 1967.

UNIVERSITY OF WISCONSIN, MADISON, WISCONSIN

Anthropology 690. Ethnological Fields: Mexico. A study of the religious-pilgrimage network which links native communities of Central Mexico with sacred religious shrines. Meets field training needs in Latin America for graduate students, regardless of their discipline. Graduate. June 5 to September 5, 1967. Herbert R. Harvey, Fernando Camara.

Tri-State Field Seminar in Geography. (Sponsored jointly by the Departments of Geography at the Universities of Iowa, Minnesota, and Wisconsin.) Provides guided experience in the formulation and study of individual field problems in one or two branches of geography. Graduate. August 14 to 31, 1967.

LISTING OF COURSES

The following time table of summer courses offered by the University is subject to whatever changes may prove necessary at registration time. Notices of all changes in time or place of meeting of classes will be supplied to advisers for checking program cards during registration. Names of instructors are listed subject to their acceptance of appointment for summer service.

Arrangement

The arrangement of subjects in this time table is alphabetical. The courses offered in each subject are listed numerically with headings to indicate the students for whom they are designed. Courses for undergraduates (designed for freshmen and sophomores) are numbered 100 to 199; for advanced undergraduates (designed for juniors and seniors), 200 to 299; for advanced undergraduates and graduates (junior, senior, or graduate standing required), 300 to 399; for graduates, 400 to 499. Following the title of each course is a statement of the requirements, if any, for admission to the course.

Classification of undergraduate students for registration purposes is based on the following scale, including physical education and military credit: freshman standing, 0 to 29 hours; sophomore standing, 30 to 59 hours; junior standing, 60 to 89 hours; senior standing, 90 or more hours.

Class periods for each course are indicated by numerals for the hours of the day and by letters for the days of the week. For example, "8-10 MWF" indicates that the class period begins at 8:00 a.m. and continues for two hours on Monday, Wednesday, and Friday; while "11 TTS" means that the class period begins at 11:00 a.m. and continues for fifty minutes on Tuesday, Thursday, and Saturday. The place of meeting of each class is shown by the number of the room and the name of the building.

Credit

Credit is counted in semester hours for undergraduates and in units for graduates, as shown in the description of each course.

Some courses have variable credit, as 3 to 5 hours or ½ to 2 units, and in registering for a course with variable credit each student puts on his program card the number of hours or units for which he intends to take the course.

Buildings

University buildings are designated by the following abbreviations:

Administration Building....Admin
Aeronautical Engineering Laboratory..Aero Lab
Agricultural Engineering Building....Agr Eng
Altgeld Hall....AH
Animal Genetics Building....An Gen
Animal Sciences Laboratory....ASL
Architecture Building....Arch
Bevier Hall....Bev Hall
Burnsides Research Laboratory....BRL
Burrill Hall....Bur Hall
Ceramics Building....Cer
Chemistry Annex....CA
Child Development Laboratory....CD
Commerce Annex....Com Annex
Commerce and Business Administration Building....Com W
Dairy Manufactures Building....DMB
Davenport Hall....DH
David Kinley Hall....DKH
East Chemistry Building....EC
Education Building....Educ
Educational Projects and Guidance Building....EPGB
Electrical Engineering Building....EEB
Engineering Hall....EH
Engineering Research Laboratory....ERL
English Building....EB
Fine and Applied Arts Building....FAB
Floriculture Building....Flor
Gregory Hall....GH
Harker Hall....HH
Hill Annex....HA
Horticulture Field Laboratory....HFL
Huff Gymnasium....HG
Illini Hall....IH
Illini Union....IU
Krannert Art Museum....KM
Labor and Industrial Relations Building....LIR
Law Building....Law
Library....Lib
Lincoln Hall....LH
Mechanical Engineering Building....MEB
Mechanical Engineering Laboratory....MEL
Men's Old Gymnasium....MOG
Men's Old Gymnasium Annex....MOG Annex
Metallurgy and Mining Building....MMB
Morrill Hall....Mor Hall
Mumford Hall....MH
Natural History Building....NHB
Noyes Laboratory of Chemistry....NL
Nuclear Engineering Laboratory....NEL
Nuclear Reactor Laboratory....Nuc Reac
Observatory....Observ
Physics Building....PB
Practice Annex....PA
Smith Music Hall....SMH
Speech Clinic....Sp Clinic
Stiven House....SH
Stock Judging Pavilion....SP
String Annex....SA
Surveying Building....Surv Bldg
Talbot Laboratory....TL
Television Building....TV Bldg
Theory Annex....TA
Transportation Building....TB
Turner Hall....TH
University High School....UHS
Utilization Laboratory....Util Lab
Vegetable Crops Building....Veg Crops
Veterinary Clinic, Large Animal....VCLA
Veterinary Clinic, Small Animal....VCSA
Veterinary Medicine Building....VM
Women's Gymnasium....W Gym

DEPARTMENT OFFICE 360 COM W

COURSES FOR UNDERGRADUATES

ACCY 101 PRINCIPLES OF ACCOUNTING I.
3 HOURS
00019 LECT-DISC A 8 MTUWTHFS 30 COM W THOMAS

ACCY 105 PRINCIPLES OF ACCOUNTING II.
PREREQUISITE--ACCY. 101.
3 HOURS
00027 LECT-DISC C 10 MTUWTHFS 30 COM W

ACCY 108 INTERMEDIATE ACCOUNTING.
PREREQUISITE--ONE YEAR OF ACCOUNTANCY, SOPHOMORE STANDING.
3 HOURS
00035 LECT-DISC B 9 MTUWTHFS 120 COM W

ACCY 166 COST ACCOUNTING.
PREREQUISITE--ACCY. 105.
3 HOURS
00043 LECT-DISC D 11 MTUWTHFS 30 COM W THOMAS

COURSES FOR ADVANCED UNDERGRADUATES

ACCY 201 FUNDAMENTALS OF ACCOUNTING.
FOR NON-COMMERCE STUDENTS ONLY.
3 HOURS
00051 LECT-DISC B 9 MTUWTHFS 226 COM W

ACCY 274 BASIC FEDERAL INCOME TAX ACCOUNTING.
PREREQUISITE--ACCY. 108.
3 HOURS
00060 LECT-DISC A 8-10 MTU THFS 152 COM W BRIGHTON

ACCY 294 SENIOR RESEARCH.
PREREQUISITE--CUMULATIVE GRADE POINT AVERAGE OF 4.0 OR HONORS IN JUNIOR YEAR OR CONSENT OF INSTRUCTOR. SENIOR STANDING.
2 TO 4 HOURS
00078 CONF ARR 274 COM W WEBER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ACCY 308 ADVANCED ACCOUNTING.
PREREQUISITE--ACCY. 106 OR 166, AND 108, AN AVERAGE OR C OR BETTER IN PRECEDING COURSES IN ACCOUNTANCY.
3 HOURS OR 3/4 UNIT
00086 LECT-DISC D 11 MTUWTHFS 152 COM W

ACCY 325 ACCOUNTING SYSTEM DESIGN.
PREREQUISITE--ACCY. 308.
3 HOURS OR 3/4 UNIT
00094 LECT-DISC D 11 MTUWTHFS 226 COM W WEBER

ACCY 371 AUDITING.
PREREQUISITE--ACCY. 308.
3 HOURS OR 3/4 UNIT
00108 LECT-DISC C 10 MTUWTHFS 152 COM W NEUMANN

ACCY 377 ADVANCED PROBLEMS.
PREREQUISITE--SENIOR STANDING, CREDIT OR REGISTRATION IN ACCY. 371.
3 HOURS OR 1 UNIT
00116 LECT-DISC A 8 MTUWTHFS 120 COM W

COURSES FOR GRADUATES

ACCY 432 ACCOUNTING UNDER DIFFERENT SOCIAL SYSTEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

00124	LECT-DISC	3-5	M	TH	120	COM W	DE MARIS

ACCY 466 COST ACCOUNTING THEORY AND ANALYSIS.
1 UNIT

00132	LECT-DISC	1-3	M	TH	120	COM W	WEBER

ACCY 481 CONCEPTS AND PRINCIPLES.
1 UNIT

00141	LECT-DISC	10-12	M	TH	120	COM W	MAUTZ

ACCY 483 INCOME DETERMINATION.
1 UNIT

00159	LECT-DISC	1-3	TU	F	120	COM W	NEUMANN

ACCY 489 HISTORY OF ACCOUNTING THEORY.
1 UNIT

00167	LECT-DISC	10-12	TU	F	120	COM W	ZIMMERMAN

ACCY 493 SPECIAL RESEARCH PROBLEMS.
1/4 TO 2 UNITS

00175	CONF	10-12	W		120	COM W	DICKEY

ACCY 499 THESIS RESEARCH.
0 TO 2 UNITS
*M. S. CANDIDATES SHOULD REGISTER IN SECTION S1, AND PH. D. CANDIDATES IN SECTION S2.

00183	DISC	*S1	2-4	W	226	COM W	DICKEY
00191	DISC	*S2	2-4	W	226	COM W	DICKEY

ADVERTISING

DEPARTMENT OFFICE 103 G H

COURSES FOR ADVANCED UNDERGRADUATES

ADV 281 INTRODUCTION TO ADVERTISING.
3 HOURS

00205	LECT-DISC	10	MTUWTHF		225	G H	MOYER
		3	M		225	G H	

ADV 291 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
2 OR 3 HOURS

00213	CONF	ARR					STAFF

COURSES FOR GRADUATES

ADV 482 RESEARCH METHODS IN ADVERTISING AND COMMUNICATIONS.
SAME AS COMM. 482.
1 UNIT

00221	LECT-DISC	10-12	M	W	123	G H	DUNN

ADV 483 ADVERTISING AND THE MASS MEDIA.
SAME AS COMM. 483.
1 UNIT

00230	LECT-DISC	8-10	TU	TH	123	G H	MOYER

ADV 490 SPECIAL TOPICS IN ADVERTISING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1/2 OR 1 UNIT

00248	CONF		ARR	STAFF

ADV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN ADVERTISING.
1 OR 2 UNITS

00256	CONF		ARR	STAFF

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

DEPARTMENT OFFICE 101 T B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

A A E 391 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT

00264	LECT-DISC	A	ARR	STAFF

COURSES FOR GRADUATES

A A E 493 SPECIAL PROBLEMS.
1 OR 2 UNITS

00272	CONF	A	ARR	STAFF

A A E 499 THESIS RESEARCH.
0 TO 2 UNITS

00281	CONF	A	ARR	STAFF
00299	CONF	CEB	ARR	BOND
00302	CONF	HOB	ARR	BARTHEL
00311	CONF	TCC	ARR	CHEN
00329	CONF	BLH	ARR	HICKS
00337	CONF	HHH	ARR	HILTON
00345	CONF	HWK	ARR	KNOEBEL
00353	CONF	JLL	ARR	LOTH
00361	CONF	YKL	ARR	LIN
00370	CONF	RWM	ARR	MCCLOY
00388	CONF	AIO	ARR	ORMSBEE
00396	CONF	LHS	ARR	SENTMAN
00400	CONF	RAS	ARR	STREHLOW
00418	CONF	HSS	ARR	STILLWELL
00426	CONF	SMY	ARR	YEN
00434	CONF	ARZ	ARR	ZAK

AGRICULTURAL ECONOMICS
INCLUDING RURAL SOCIOLOGY

AGRICULTURAL ECONOMICS

DEPARTMENT OFFICE 305 M H

COURSES FOR ADVANCED UNDERGRADUATES

AG EC 200 PROBLEMS IN AGRICULTURAL ECONOMICS.
PREREQUISITE--MINIMUM GRADE-POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
2 TO 5 HOURS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
A--AGRICULTURAL MARKETING
BARTLETT, BRINEGAR, BROADBENT, HIERONYMUS
HILL, JUDGE, KELLY, MUTTI, ROUSH, SCHMIDT
B--AGRICULTURAL PRICES AND STATISTICAL ANALYSIS
JUDGE, SCOTT, WEST
C--FARM MANAGEMENT AND LAND ECONOMICS
BAKER, DOVRING, HERBST, HOLCOMB,
REISS, SCOTT, SWANSON, THOMPSON, WILLS
D-RURAL ORGANIZATION FOLSE, LINDSTROM, SCHWEITZER
E-AGRICULTURAL LAW HANNAH, KRAUSZ
F-AGRICULTURAL POLICY HALCROW, SCHMIDT, SPITZE, THOMPSON
G--AGRICULTURAL FINANCE BAKER, HOLCOMB, SPITZE
00442 CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG EC 303 AGRICULTURAL LAW.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 TO 1 UNIT
FIRST FOUR WEEKS.
*PLUS TWO ADDITIONAL HOURS TO BE ARRANGED.
00451 LECT-DISC A *8-10 MTUWTHF N107 T H HANNAH

AG EC 331 GRAIN MARKETING.
PREREQUISITE--AG. EC. 230 OR AN ELEMENTARY MARKETING COURSE.
FIELD TRIPS, ESTIMATED EXPENSE, $10.
3 HOURS, OR 3/4 OR 1 UNIT
00469 LECT-DISC C 10-12 MTUWTH 320 M H HIERONYMUS

COURSES FOR GRADUATES

AG EC 491 SEMINAR AND SPECIAL TOPICS.
EACH GRADUATE STUDENT WHOSE MAJOR IS AGRICULTURAL ECONOMICS MUST REGISTER IN THIS COURSE.
*ONLY STUDENTS WHO REGISTER FOR CREDIT AND COMPLETE SPECIAL STUDIES UNDER DIRECTION OF ONE OR MORE STAFF MEMBERS WILL RECEIVE CREDIT.
*0 TO 2 UNITS
00477 DISC ARR STAFF

AG EC 499 THESIS RESEARCH.
0 TO 2 UNITS
00485 CONF ARR STAFF

RURAL SOCIOLOGY
DEPARTMENT OF AGRICULTURAL ECONOMICS.

COURSES FOR ADVANCED UNDERGRADUATES

R SOC 277 RURAL SOCIAL CHANGE.
SAME AS SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

00493	LECT-DISC	B	9	MTUWTHF	W115	T H	FOLSE
		B	8	TU	W115	T H	

COURSES FOR GRADUATES

R SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS.

00507	LECT-DISC	C	10-12	TUWTHF	316S	M H	LINDSTROM

R SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY,
CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

00515	CONF		ARR				STAFF

AGRICULTURAL ENGINEERING

DEPARTMENT OFFICE 245 AGR ENG

NOTE THE COURSE IN AGRICULTURAL ENGINEERING FOR AGRICULTURE STUDENTS IS 300. COURSES FOR ENGINEERING STUDENTS ARE 296, 299, AND 396.

COURSES FOR ADVANCED UNDERGRADUATES

AG E 296 HONORS PROJECT.
PREREQUISITE--JAMES SCHOLAR IN ENGINEERING--CONSENT OF INSTRUCTOR.
1 TO 4 HOURS

00523	CONF	&	ARR				STAFF

AG E 299 UNDERGRADUATE THESIS.
PREREQUISITE--AG. E. 298 AND SENIOR STANDING IN ENGINEERING.
2 TO 4 HOURS

00531	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AG E 300 SPECIAL PROBLEMS.
PREREQUISITE--NONENGINEERING STUDENT, MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND SPECIAL PROBLEMS COURSE.
3 HOURS OR 1/2 UNIT

00558	CONF	&A	ARR				STAFF
00540	CONF	B	ARR				STAFF

AG E 331 FARM MACHINERY TECHNOLOGY.
PREREQUISITE--AG. E. 112 OR 221.
3 HOURS OR 3/4 UNIT
FIRST FOUR WEEKS.

00566	LECT	10	MTUWTHF	132	AGR ENG	YOERGER
	LAB	1-3	M W F	132	AGR ENG	

AG E 396 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING IN ENGINEERING.
3 HOURS OR 1/2 UNIT

00574	CONF	ARR	STAFF

COURSES FOR GRADUATES

AG E 496 PROBLEMS IN AGRICULTURAL ENGINEERING.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
1 UNIT

00582	CONF	ARR	STAFF

AG E 499 THESIS RESEARCH.
1 TO 2 UNITS

00591	CONF	ARR	STAFF

AGRICULTURE

COURSES FOR ADVANCED UNDERGRADUATES

AGR 208 COOPERATIVE EXTENSION WORK--SUMMER TRAINING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS

00604	CONF	ARR	ANDERSON

AGRONOMY

DEPARTMENT OFFICE W201 T H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AGRON 300 ADVANCED SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
*CREDIT IS NOT GIVEN TO GRADUATE STUDENTS MAJORING IN AGRONOMY.
*3 TO 5 HOURS, OR 1/2 TO 2 UNITS

00612	LAB-DISC	ARR	STAFF

AGRON 322 FORAGE CROPS AND PASTURES.
PREREQUISITE--AGRON. 121.
3 HOURS OR 1/2 UNIT

00621	LECT	1-3	M W F	N107	T H	JACKOBS

COURSES FOR GRADUATES

AGRON 400 SEMINAR.
REQUIRED OF ALL GRADUATE MAJORS IN AGRONOMY.
PREREQUISITE--GRADUATE STANDING.
NO CREDIT

00639	LAB-DISC	ARR	CARMER

AGRON 499 THESIS RESEARCH.
0 TO 2 UNITS
WORK TO BE TAKEN IN THE FOLLOWING SUBJECTS--
A-SOILS ALDRICH, BEAVERS, FEHRENBACHER, GIESEKING, JONES, KLUTE, KURTZ, MELSTED, MILLER, ODELL, PETERS, RUNGE, SABEY, STEVENSON, TYNER, WELCH.
B-CROPS ALEXANDER, BERNARD, BROWN, BURGER, CARMER, DUDLEY, EARLEY, GERDEMANN, HADLEY, HAGEMAN, HANSON, HARLAN, HITTLE, HOOKER, JACKOBS, KNAKE, LAMBERT, LAUGHNAN, LENG, PATTERSON, PENDLETON, SCOTT, SEIF, SLIFE, WEBER, WEIBEL WILSON, AND WOOLLEY.
WILSON, AND WOOLLEY.
00647 CONF ARR STAFF

AMERICAN CIVILIZATION

MAJOR--STUDENTS WHO ELECT AMERICAN CIVILIZATION AS A MAJOR MUST COMPLETE FORTY SEMESTER HOURS--WHICH SATISFIES BOTH MAJOR AND MINOR REQUIREMENTS FOR GRADUATION--IN COURSES INDICATED BELOW, AT LEAST TWENTY HOURS BEING IN COURSES NUMBERED 300 OR ABOVE. THEY ARE REQUIRED TO MAINTAIN A 3.0 GENERAL AVERAGE AT ALL TIMES, THAT IS, WHEN THE AVERAGE DROPS BELOW THAT LEVEL THE STUDENT SHALL DROP FROM THIS MAJOR. SPECIFICALLY REQUIRED ARE--

1-ENGL. 255-256, HIST. 151-152, AND EITHER ART 323 OR 324 OR PHIL. 313--A TOTAL OF FIFTEEN HOURS. EQUIVALENT OR MORE ADVANCED COURSES MAY BE SUBSTITUTED PROVIDED THAT, TAKEN TOGETHER, THEY CONSTITUTE COMPREHENSIVE SURVEYS OF THE THREE FIELDS OF AMERICAN HISTORY, AMERICAN LITERATURE, AND EITHER AMERICAN ART OR AMERICAN PHILOSOPHY. APPROVAL FOR ANY SUCH SUBSTITUTION MUST BE REQUESTED BY A PETITION TO THE DEAN BEARING THE RECOMMENDATION OF THE ADVISOR FOR THE CURRICULUM.

2-AT LEAST SIX HOURS OF ADVANCED WORK IN ENGLISH AND AT LEAST SIX HOURS OF ADVANCED WORK IN HISTORY, CHOSEN FROM THE FOLLOWING COURSES ALL OF WHICH ARE IN THE AMERICAN FIELD--ENGL. 285-286, 287, 316, 352, 353-354, 375-376, HIST. 352, 354, 355, 356, 357-358, 359, 360, 361-362, 363-364, 367-368, 369-370, 371-372, 373-374. SPEECH 366 MAY BE SUBSTITUTED FOR ENGL. 316.

3-AT LEAST SIX HOURS FROM THE FOLLOWING COURSES--ARCH. 215-216, ECON 236, ED. 302, GEOG. 223, POL. SCI. 150-151, 351, 381, 397, SPCH. 312, OR COURSES LISTED IN THE PRECEDING PARAGRAPHS, IF NOT COUNTED TOWARD THE REQUIREMENTS THEREUNDER.

4-AT LEAST SIX ADDITIONAL HOURS IN ONE OF THE FOLLOWING DEPARTMENTS-ART, ENGLISH, HISTORY, PHILOSOPHY, OR POLITICAL SCIENCE --CHOSEN FROM COURSES WHICH DEAL WITH NON-AMERICAN ASPECTS OF THE SUBJECT BUT WHICH ARE CLOSELY RELATED TO SPECIFIC COURSES SELECTED UNDER THE PRECEDING REQUIREMENTS, SUCH AS, FOR EXAMPLE, A COURSE DEALING WITH THE SAME PERIOD IN EUROPEAN HISTORY OR IN ENGLISH LITERATURE.

THE COMMITTEE IN CHARGE OF THE CURRICULUM ADVISES EACH STUDENT CONCERNING THESE ADDITIONAL HOURS, ASSUMES RESPONSIBILITY FOR THE STUDENTS REGISTRATION IN THE PROPER COURSES, AND FILES A RECORD OF THE STUDENTS REGISTRATION INDICATING THE SPECIFIC COURSES APPROVED AS SATISFYING THIS REQUIREMENT IN THE OFFICE OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES.

ADVISER--CHAIRMAN OF THE COMMITTEE IN CHARGE--PROFESSOR ROBERT W. JOHANNSEN, 359 ARMORY.

MINORS--THIS CURRICULUM HAS BEEN APPROVED AS A MINOR FOR STUDENTS MAJORING IN GEOGRAPHY, HISTORY, POLITICAL SCIENCE, AND SPEECH. A SPLIT MINOR IS NOT AUTHORIZED. NO COURSE COUNTED TOWARD THE STUDENTS MAJOR MAY BE COUNTED TOWARD THE MINOR. THE MINOR CONSISTS OF AT LEAST TWENTY SEMESTER HOURS, INCLUDING THE REQUIRED COURSES HIST. 151-152 AND ENGL. 113-114, AND IN ADDITION--

1-AT LEAST THREE HOURS FROM COURSES LISTED UNDER -2- OF THE REQUIREMENTS FOR THE MAJOR IN AMERICAN CIVILIZATION, EXCLUDING THOSE NUMBERED UNDER 300 AND THOSE IN THE DEPARTMENT IN WHICH THE STUDENT IS MAJORING.

2-THE REMAINDER, IF ANY, CHOSEN FROM COURSES LISTED UNDER -1- AND -3- OF THE REQUIREMENTS FOR MAJOR IN AMERICAN CIVILIZATION, EXCLUDING THOSE NUMBERED UNDER 300 AND THOSE IN THE DEPARTMENT IN WHICH THE STUDENT IS MAJORING.

ANIMAL SCIENCE

DEPARTMENT OFFICE 328 M H

COURSES FOR ADVANCED UNDERGRADUATES

AN S 200 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEMS COURSE.
3 TO 5 HOURS

00655	LAB	ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

AN S 303 PORK PRODUCTION.
PREREQUISITE--AN. S. 220 OR 221 OR EQUIVALENT.
3 HOURS OR 3/4 UNIT
FIRST FOUR WEEKS.

00663	LECT	3-5	MTUWTHF	316S M H	JENSEN
		7-9PM	W	316S M H	

COURSES FOR GRADUATES

AN S 408 LABORATORY METHODS IN PHYSIOLOGY OF REPRODUCTION.
SAME AS ZOOL. 408.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*COMBINED CREDIT IN AN.S. 407 AND 408 MAY NOT EXCEED TWO UNITS.
*1/2 TO 1 UNIT

00671	LAB	ARR	NALBANDOV

AN S 410 RESEARCH METHODS IN ANIMAL SCIENCE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/4 TO 1 UNIT

00680	CONF	ARR	

AN S INSTRUCTORS-BECKER, GARRIGUS, SCOTT AND OTHERS.

AN S 499 THESIS RESEARCH.
0 TO 2 UNITS

00698	CONF	ARR	GRADUATE STAFF

ANTHROPOLOGY

DEPARTMENT OFFICE 109 D H

MAJOR--TWENTY HOURS IN ANTHROPOLOGY, EXCLUDING ANTH. 102 AND 103. STUDENTS ARE STRONGLY ADVISED TO TAKE AT LEAST ONE COURSE FROM EACH OF THE PRINCIPAL FIELDS OF ANTHROPOLOGY--ARCHAEOLOGY, ETHNOLOGY-INCLUDING AT LEAST ONE COURSE DEALING WITH A PARTICULAR WORLD AREA-LINGUISTICS, AND PHYSICAL ANTHROPOLOGY.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--CLASSICS, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LINGUISTICS, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY AND ZOOLOGY. THE INTERDEPARTMENTAL PROGRAM IN ASIAN STUDIES, LATIN-AMERICAN STUDIES OR IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

ANTH 103 INTRODUCTION TO CULTURAL ANTHROPOLOGY.
4 HOURS

00701	LECT		9-11	M WTH	124 BUR HALL	EYDE
00710	QUIZ	A	10-12	TU	209A D H	
00728	QUIZ	B	10-12	TU	109A D H	
00736	QUIZ	C	1-3	W	209A D H	

COURSES FOR ADVANCED UNDERGRADUATES

ANTH 290 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS

00744	CONF	&	ARR		STAFF

ANTH 291 HONORS COURSE.
PREREQUISITE--SENIOR STANDING AND 4.0 AVERAGE.
2 HOURS

00752	CONF	&	ARR		STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ANTH 300 INTRODUCTION TO LINGUISTICS.
SAME AS LING. 300.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS OR 1/2 UNIT

00761	LECT-DISC		10-12	M W F	252 ADMIN	LIGHTNER

ANTH 315 AREA STUDIES IN ETHNOMUSICOLOGY.
SAME AS MUSIC 317.
PREREQUISITE--SENIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS OR 2 UNITS
*3 HOURS OR 1/2 UNIT
TOPIC--MUSIC OF SOUTH ASIA.

00779	LECT-DISC	A	1-3	TU TH	8 S A	NETTL & STAFF

ANTH 316 INTRODUCTION TO MUSIC OF THE WORLDS CULTURES.
SAME AS MUSIC 316.
FOR STUDENTS OUTSIDE THE SCHOOL OF MUSIC.
PREREQUISITE--ANTH. 103 OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

00787	LECT-DISC	A	11	TUWTHF	104 1203 W NEV	NETTL

ANTH 340 HUMAN EVOLUTION, I.
PREREQUISITE--ANTH. 240 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00795	LECT-DISC		9-11	M W F	209A D H	STAFF

ANTH 354 FIELD TECHNIQUES IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS OR 1 UNIT

00809	CONF		ARR					STAFF

ANTH 355 LABORATORY TECHNIQUES AND PROBLEMS IN ARCHAEOLOGY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
FIELD TRIP REQUIRED.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS OR 1 UNIT

00817	CONF		ARR					STAFF

ANTH 363 RELIGION IN PRIMITIVE SOCIETY.
PREREQUISITE--ANTH. 102 AND 103, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00825	LECT-DISC		2-4	M	WTH	140	BUR HALL	EYDE

ANTH 364 FIELD WORK IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED. CONCURRENT REGISTRATION IN ANTH. 365, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS OR 1 UNIT

00833	CONF		ARR					STAFF

ANTH 365 ANALYSIS OF FIELD DATA IN CULTURAL ANTHROPOLOGY.
PREREQUISITE--ANTH. 102 AND 103, SPEAKING KNOWLEDGE OF THE LANGUAGE OF THE AREA CONCERNED, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 2 UNITS, IF AREA OR PROBLEMS ARE DIFFERENT.
*3 HOURS OR 1 UNIT

00841	CONF		ARR					STAFF

ANTH 368 PEOPLES AND CULTURES OF INDIA.
PREREQUISITE--ANTH. 102 AND 103 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

00850	LECT-DISC		1	MTUWTHF		254	ADMIN	STAFF

COURSES FOR GRADUATES

ANTH 450 SEMINAR IN ANTHROPOLOGY.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

00868	CONF		ARR					STAFF

ANTH 489 READINGS IN ANTHROPOLOGY.
PREREQUISITE--ONE SEMESTER OF GRADUATE WORK IN ANTHROPOLOGY--CONSENT OF ADVISER.
1/2 OR 1 UNIT

00876	CONF		ARR					STAFF

ANTH 490 INDIVIDUAL TOPICS IN ANTHROPOLOGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

00884	CONF		ARR					STAFF

ANTH 499 THESIS RESEARCH.
0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS.

00892	CONF	*A	ARR					STAFF
00906	CONF	*B	ARR					STAFF

ARCHITECTURE

DEPARTMENT OFFICE 106 ARCH

IN THE CURRICULUM IN ARCHITECTURE, NORMAL COURSE PROGRESS IN SEQUENCE IS IMPERATIVE. STUDENTS FAILING TO COMPLETE ANY REQUIRED COURSE MORE THAN ONE SEMESTER LATER THAN THE TIME DESIGNATED IN THE CURRICULUM, ARE PROHIBITED FROM PROGRESSIVE REGISTRATION IN ARCHITECTURAL COURSES UNTIL THE DEFICIENCY IS CORRECTED.

COURSES FOR UNDERGRADUATES

ARCH 131 ARCHITECTURAL DESIGN, II.
PREREQUISITE--ARCH. 101, CREDIT OR REGISTRATION IN G. E. 108, ALSO CREDIT OR REGISTRATION IN ARCH. 141, SOPHOMORE STANDING.
3 HOURS

00914	LAB		9-12	MTUWTHFS	206	F A B

ARCH 132 ARCHITECTURAL DESIGN, III.
PREREQUISITE--ARCH. 131.
3 HOURS

00922	LAB		9-12	MTUWTHFS	206	F A B

COURSES FOR ADVANCED UNDERGRADUATES

ARCH 233 ARCHITECTURAL DESIGN, IV.
PREREQUISITE--ARCH. 132, CREDIT OR REGISTRATION IN T.A.M. 150 OR 171 AND REGISTRATION IN ARCH. 241.
3 HOURS

00931	LAB		9-12	MTUWTHFS	206	F A B

ARCH 234 ARCHITECTURAL DESIGN, V.
PREREQUISITE--ARCH. 233.
3 HOURS

00949	LAB		9-12	MTUWTHFS	206	F A B

ARCH 235 ARCHITECTURAL DESIGN, VI.
PREREQUISITE--ARCH. 234.
5 HOURS

00957	LAB	D	8-12	M W F	206	F A B
		D	1-5	M W F	206	F A B
		D	1-4	TU TH	206	F A B

ARCH 236 ARCHITECTURAL DESIGN, VII.
PREREQUISITE--ARCH. 235 AND 265.
5 HOURS

00965	LAB	D	8-12	M W F	206	F A B
		D	1-5	M W F	206	F A B
		D	1-4	TU TH	206	F A B

COURSES FOR GRADUATES

ARCH 491 SPECIAL PROBLEMS IN BUILDING CONSTRUCTION.
PREREQUISITE--CREDIT OR REGISTRATION IN ARCH. 481.
1/2 TO 2 UNITS

00973	CONF		ARR

ARCH 494 SPECIAL PROBLEMS IN ARCHITECTURAL DESIGN.
PREREQUISITE--ARCH. 435 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
*ADDITIONAL HOURS TO BE ARRANGED.

00981	LAB		ARR

DEPARTMENT OFFICE 143 F A B

COURSES IN ART APPRECIATION AND THE HISTORY OF ART

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 313 ITALIAN RENAISSANCE ART.
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT
00990 LECT A 8 MTUWTHFS 62 K M GAMBILL

ART 329 INTRODUCTION TO INDIAN ART.
PREREQUISITE--ONE YEAR OF HISTORY OF ART OR CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT
01006 LECT A 2 MTUWTHF 62 K M BEGLEY

STUDIO COURSES PRIMARILY FOR NON-ART STUDENTS

COURSES FOR UNDERGRADUATES

ART 105 INTRODUCTION TO WATER COLOR PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS CREDIT.
*2 HOURS
01014 LAB A 9-1 M W F 229 F A B GUNTER

ART 106 INTRODUCTION TO OIL PAINTING.
NOT OPEN TO STUDENTS MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
01022 LAB A 9-1 M W F 9 F A B HOGAN

ART 107 ELEMENTARY DRAWING.
FOR STUDENTS NOT MAJORING IN ART.
*STUDENTS MAY ACCUMULATE FOUR HOURS.
*2 HOURS
01031 LAB A 1-5 M W F 236 F A B WALLACE

PROFESSIONAL AND STUDIO COURSES

COURSES FOR UNDERGRADUATES

ART 117 DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS
AND IN HOME ECONOMICS OPTION 1.
3 HOURS
01049 LAB A 7-10 MTUWTHFS 336 F A B BARON

ART 118 DRAWING, II.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS AND
IN HOME ECONOMICS OPTION 1.
PREREQUISITE--ART 117.
2 HOURS
01057 LAB A 8-10 MTUWTHFS 338 F A B BARON

ART 119 DESIGN, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS
AND IN HOME ECONOMICS OPTION 1.
2 HOURS
01065 LAB A 10-12 MTUWTHFS 219 F A B BRANDES

ART 120 DESIGN, II.
OPEN ONLY TO STUDENTS IN COLLEGE OF FINE AND APPLIED ARTS AND IN HOME ECONOMICS OPTION 1.
PREREQUISITE--ART 119.
3 HOURS

01073	LAB	A	10-1	MTUWTHFS	219	F A B		BRANDES

ART 125 LIFE DRAWING, I.
PREREQUISITE--ART 118.
2 HOURS

01081	LAB	A	2-5	TUWTHF	336	F A B		DIETEMANN

ART 126 LIFE DRAWING, II.
PREREQUISITE--ART 125.
2 HOURS

01090	LAB	A	2-5	TUWTHF	336	F A B		DIETEMANN

ART 131 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 118, 120, 122.
2 HOURS

01103	LAB	A	9-1	TU TH S	32	F A B		ZAGORSKI

ART 132 ELEMENTARY COMPOSITION.
PREREQUISITE--ART 131.
2 HOURS

01111	LAB	A	9-1	TU TH S	40	F A B		ZAGORSKI

ART 133 DESIGN WORKSHOP.
PRIMARILY FOR STUDENTS IN INDUSTRIAL DESIGN CURRICULUM.
PREREQUISITE--ART 118, 120, 122.
2 HOURS

01120	LAB	A	9-1	TU TH S	32	F A B		ZAGORSKI

ART 134 DESIGN WORKSHOP.
PRIMARILY FOR STUDENTS IN INDUSTRIAL DESIGN CURRICULUM.
PREREQUISITE--ART 133.
2 HOURS

01138	LAB	A	9-1	TU TH S	32	F A B		ZAGORSKI

ART 141 STILL LIFE, I.
PREREQUISITE--ART 118, 120, 122.
2 HOURS

01146	LAB	A	9-1	M W F	9	F A B		HOGAN

ART 142 STILL LIFE, II.
PREREQUISITE--ART 141.
2 HOURS

01154	LAB	A	9-1	M W F	9	F A B		HOGAN

ART 151 SCULPTURE, I.
PREREQUISITE--ART 118, 120, 122 OR ARCH. 234.
2 HOURS

01162	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 152 SCULPTURE, II.
PREREQUISITE--ART 151.
2 HOURS

01171	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 161 CALLIGRAPHIC DESIGN.
PREREQUISITE--SOPHOMORE STANDING IN ART.
3 HOURS

01189	LAB	A	9-12	MTUWTHFS	311	F A B		PERLMAN

ART 162 LETTERFORM DESIGN.
PREREQUISITE--SOPHOMORE STANDING IN ART.
3 HOURS

01197	LAB	A	9-12	MTUWTHFS	311	F A B		PERLMAN

ART 181 FREEHAND DRAWING, I.
OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS.
2 HOURS

01201	LAB	A	1-5	M W F	240	F A B	WALLACE

ART 182 FREEHAND DRAWING, II.
* OPEN ONLY TO STUDENTS IN THE COLLEGE OF FINE AND APPLIED ARTS.
PREREQUISITE--ART 181.
2 HOURS

01219	LAB	A	1-5	M W F	240	F A B	WALLACE

ART 183 FREEHAND DRAWING, III.
PREREQUISITE--ART 182. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS

01227	LAB	A	1-5	M W F	229	F A B	KOVACS

ART 184 FREEHAND DRAWING, IV.
PREREQUISITE--ART 183. PRIMARILY FOR STUDENTS IN ARCHITECTURE.
2 HOURS

01235	LAB	A	1-5	M W F	229	F A B	KOVACS

ART 190 RECREATIONAL CRAFTS, I.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH ART 190 AND ART 203.
*2 HOURS

01243	LAB	A	2-5	TUWTHF	106	F A B	BREEN

ART 191 RECREATIONAL CRAFTS, II.
PRIMARILY FOR RECREATION MAJORS IN PHYSICAL EDUCATION.
PREREQUISITE--ART 190.
2 HOURS

01251	LAB	A	2-5	TUWTHF	106	F A B	BREEN

ART 194 POTTERY, I.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF INSTRUCTOR.
2 HOURS

01260	LAB	A	9-1	M W F	152	N E L	FRITH

ART 195 POTTERY, II.
PREREQUISITE--ART 194.
2 HOURS

01278	LAB	A	9-1	M W F	152	N E L	FRITH

COURSES FOR ADVANCED UNDERGRADUATES

ART 201 WATER COLOR, I.
PREREQUISITE--ART 118 AND 120.
2 HOURS

01286	LAB	A	9-1	M W F	229	F A B	GUNTER

ART 202 WATER COLOR, II.
PREREQUISITE--ART 201.
2 HOURS

01294	LAB	A	9-1	M W F	229	F A B	GUNTER

ART 203 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
*CREDIT IS NOT GIVEN FOR BOTH ART 190 AND ART 203.
*2 HOURS

01308	LAB	A	2-5	TUWTHF	107	F A B	BREEN

ART 204 ART EDUCATION LABORATORY.
PREREQUISITE--ART 132 OR JUNIOR STANDING.
2 HOURS

01316	LAB	A	2-5	TUWTHF	107	F A B	BREEN

ART 225 INTERMEDIATE DRAWING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS

01324	LAB	A	2-5	TUWTHF	338	F A B	DIETEMANN

ART 226 INTERMEDIATE DRAWING, II.
PREREQUISITE--ART 225.
2 HOURS

01332	LAB	A	2-5	TUWTHF	338	F A B		DIETEMANN

ART 231 INTERMEDIATE COMPOSITION, I.
PREREQUISITE--ART 132.
3 HOURS

01341	LAB	A	9-1	M W F	318	F A B		SPRAGUE
		A	9-12	TU TH	318	F A B		

ART 232 INTERMEDIATE COMPOSITION, II.
PREREQUISITE--ART 231.
3 HOURS

01359	LAB	A	9-1	M W F	318	F A B		SPRAGUE
		A	9-12	TU TH	318	F A B		

ART 243 FIGURE PAINTING, I.
PREREQUISITE--JUNIOR STANDING IN ART.
2 HOURS

01367	LAB	A	9-1	M W F	324	F A B		SPRAGUE

ART 244 FIGURE PAINTING, II.
PREREQUISITE--ART 243.
2 HOURS

01375	LAB	A	9-1	M W F	324	F A B		SPRAGUE

ART 251 ADVANCED SCULPTURE, I.
PREREQUISITE--ART 152.
2 HOURS

01383	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 252 ADVANCED SCULPTURE, II.
PREREQUISITE--ART 251.
2 HOURS

01391	LAB	A	9-1	TU TH S	25	F A B		STAFF

ART 265 GRAPHIC DESIGN, I.
PREREQUISITE--ART 161 AND 162 FOR GRAPHIC DESIGN MAJORS--JUNIOR STANDING IN ART OR CONSENT OF INSTRUCTOR FOR OTHERS.
3 HOURS

01405	LAB	A	9-12	MTUWTHFS	319	F A B		PERLMAN

ART 266 GRAPHIC DESIGN, II.
PREREQUISITE--ART 265.
3 HOURS

01413	LAB	A	9-12	MTUWTHFS	319	F A B		PERLMAN

ART 281 FREEHAND DRAWING, V.
PREREQUISITE--ART 184.
2 HOURS

01421	LAB	A	1-5	M W F	229	F A B		KOVACS

ART 282 FREEHAND DRAWING, VI.
PREREQUISITE--ART 281.
2 HOURS

01430	LAB	A	1-5	M W F	229	F A B		KOVACS

ART 283 PRINTMAKING, I.
PREREQUISITE--JUNIOR STANDING IN ART OR CONSENT OF INSTRUCTOR.
2 HOURS

01448	LAB	A	2-5	TUWTHF	GRAD STUDIO			TELLEZ

ART 284 PRINTMAKING, II.
PREREQUISITE--ART 283.
2 HOURS

01456	LAB	A	2-5	TUWTHFS	GRAD STUDIO			TELLEZ

ART 294 CERAMIC DESIGN, I.
PREREQUISITE--JUNIOR STANDING IN CURRICULUM IN CRAFTS.
3 HOURS

01464	LAB	A	9-1	M W F	152	N E L	FRITH
		A	9-12	TU TH	152	N E L	

ART 295 CERAMIC DESIGN, II.
PREREQUISITE--ART 294.
3 HOURS

01472	LAB	A	9-1	M W F	152	N E L	FRITH
		A	9-12	TU TH	152	N E L	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ART 332 DRAWING.
PREREQUISITE--ART 126 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE.
2 HOURS, OR 1/2 TO 1 UNIT

01481	LAB	A	2-5	TUWTHF	338	F A B	DIETEMANN

ART 333 PAINTING.
PREREQUISITE--ART 142 OR EQUIVALENT, FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M. F. A. IN PAINTING.
*COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS.
*2 TO 4 HOURS, OR 1/2 TO 1 UNIT

01499	LAB	A	9-1	M W F	324	F A B	SPRAGUE

ART 351 ADVANCED SCULPTURE TECHNIQUES.
PREREQUISITE--ART 252 OR EQUIVALENT.
2 HOURS, OR 1/2 TO 1 UNIT

01502	LAB	A	9-1	TU TH S	25	F A B	STAFF

ART 383 PRINT MEDIA.
PREREQUISITE--ART 284 OR EQUIVALENT. FOR GRADUATE STUDENTS, CONSENT OF DEPARTMENTAL GRADUATE COMMITTEE. NOT OPEN TO CANDIDATES FOR M.F.A. IN PAINTING.
2 HOURS, OR 1/2 TO 1 UNIT

01511	LAB	A	2-5	TUWTHF	GRAD STUDIO		TELLEZ

ART 394 CERAMIC DESIGN.
PREREQUISITE--ART 295 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 TO 2 UNITS

01529	LAB	A	ARR		152	N E L	FRITH

COURSES FOR GRADUATES

ART 491 SPECIAL PROBLEMS.
1/2 TO 2 UNITS

01537	LAB	A	ARR		GRAD STUDIO		DOOLITTLE
01545	LAB	B	ARR		140	F A B	STAFF

ART 493 SEMINAR.
1 UNIT

01553	LECT-DISC	A	ARR		140	F A B	GAMBILL

ART 495 PAINTING LABORATORY.
1/2 TO 3 UNITS

01561	LAB	A	ARR		GRAD STUDIO		DOOLITTLE

ART 497 PRINT WORKSHOP.
PREREQUISITE--GRADUATE STANDING IN ART.
1/2 TO 3 UNITS

01570	LAB	A	ARR		GRAD STUDIO		TELLEZ

ASIAN STUDIES

DEPARTMENT OFFICE ROOM 316 1207 W OREGON

STUDENTS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF EAST, SOUTHEAST, SOUTH, AND MIDDLE EAST ASIAN AFFAIRS AND CULTURES ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR AND FACULTY MEMBERS OF THE CENTER FOR ASIAN STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. THE CENTER IS DESIGNATED A NATIONAL DEFENSE EDUCATION ACT-N.D.E.A.-LANGUAGE AND AREA STUDIES CENTER. THE DIRECTOR IS PROFESSOR SOLOMON B. LEVINE, ROOM 316, 1207 WEST OREGON, URBANA.

BELOW ARE LISTED COURSES IN THE ASIAN STUDIES AREAS. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.

AG EC 401
AGR 190
AGRON 429
ANTH 309, 310, 315, 316, 366, 368, 369, 375, 382, 383, 429, 450C, 461, 462
ARAB 201, 202, 203, 204, 303, 304
ART 327, 328, 491
BURM 201, 202, 303, 304
CHIN 201, 202, 303, 304, 305, 306
ECON 228, 250, 255, 353, 358 450, 451, 455
GEOG 351, 357, 369, 382, 429, 495
HINDI 201, 202, 303, 304, 305, 306
HIST 191, 192, 199, 209, 210, 298, 307, 308, 387, 388, 389, 391, 392, 393, 394, 395, 396, 398, 441, 443, 445, 453B
INDON 201, 202, 303, 304
JAPAN 201, 202, 303, 304, 305, 306
L I R 418
LING 199, 303, 309, 310, 350, 351, 490
MUSIC 316, 317
PHIL 110, 361
POL S 241, 337, 338, 347, 348, 349, 380, 441, 447
R SOC 270, 277, 407, 477
SOC S 201, 202
SOC 100A, 218, 270, 277, 326, 343, 355, 369, 371, 407, 418, 477
SPCH 468

DURING THE SUMMER OF 1967 THERE WILL BE TWO LANGUAGE AND AREA INSTITUTES SPONSORED JOINTLY BY THE UNIVERSITY OF ILLINOIS AND MEMBER INSTITUTIONS OF THE COMMITTEE OF INSTITUTIONAL COOPERATION.

AT THE UNIVERSITY OF MICHIGAN WILL BE HELD THE 5TH C.I.C. FAR EASTERN LANGUAGE INSTITUTE, AT WHICH QUALIFIED UNIVERSITY OF ILLINOIS STUDENTS ARE ELIGIBLE TO TAKE INTENSIVE COURSES IN CHINESE AND JAPANESE FOR APPROPRIATE CREDIT AS PART OF THE U. OF I. SUMMER SESSION OFFERINGS. COURSES IN CHINESE AND JAPANESE WILL BE OFFERED AT THE ELEMENTARY, INTERMEDIATE, AND ADVANCED LEVELS. FOR FURTHER INFORMATION ABOUT THESE COURSES AND THE C.I.C. INSTITUTE IN GENERAL, STUDENTS OR FACULTY ADVISERS SHOULD CONTACT THE CENTER FOR ASIAN STUDIES, 1207 W. OREGON, URBANA, ILLINOIS, 333-4850.

AT THE URBANA CAMPUS WILL BE HELD THE INTER-UNIVERSITY ROTATING SUMMER PROGRAM IN SOUTH ASIAN STUDIES. THE FOLLOWING COURSES WILL BE INCLUDED IN THIS PROGRAM.

ANTH 315, 368
ART 329
BENG 207, 307, 309
C LIT 361
ENGL 392
HINDI 207, 307, 309, 310
HIST 387, 388, 389
KASHM 207
LING 303, 351, 391, 392, 394 416
MUSIC 317
PERS 207
PHIL 361, 375
POL S 349, 447
RHET 392
SANSK 207, 307, 309
SOC 340, 440
TAMIL 307, 309
TELUG 207, 307, 309
URDU 207, 307, 309

FOR FURTHER INFORMATION ABOUT THESE INSTITUTES AND THEIR COURSE OFFERINGS, STUDENTS OR FACULTY ADVISERS SHOULD CONTACT THE CENTER FOR ASIAN STUDIES, 1207 W. OREGON, URBANA, ILLINOIS, 333-4850.

ASTRONOMY

DEPARTMENT OFFICE 108A OBSERV

MAJOR--TWENTY HOURS IN ASTRONOMY.

MINOR--TWENTY HOURS WHICH MUST INCLUDE PHYSICS 106, 107, AND 108. THE REMAINING EIGHT HOURS MAY BE TAKEN IN PHYSICS OR IN ONE OF THE FOLLOWING SUBJECTS--CHEMISTRY, GEOLOGY, MATHEMATICS, PHILOSOPHY. IF TWO SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

INDIVIDUAL INSTRUCTION IS PROVIDED FOR SUPERIOR UNDERGRADUATE STUDENTS AT HOURS TO BE ARRANGED.

COURSES FOR UNDERGRADUATES

ASTR 101 DESCRIPTIVE ASTRONOMY.
NOT OPEN TO STUDENTS WHO HAVE HAD TWO OR MORE SEMESTERS OF COLLEGE PHYSICS.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN ASTR. 210.
*4 HOURS
*ONE EVENING HOUR AT OBSERVATORY--WED 8 PM.

01588	LECT	*9	MTUWTHF	138	ADMIN	AVNER
	DISC	2	TU TH	252	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES

ASTR 210 GENERAL ASTRONOMY.
PREREQUISITE--TWO SEMESTERS OF COLLEGE PHYSICS.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN ASTR. 101 OR ASTR. 102.
*3 HOURS
*ONE EVENING HOUR AT OBSERVATORY--TU 8 PM.

01596	LECT	*10	MTUWTHF	138	ADMIN	WYATT

COURSES FOR GRADUATES

ASTR 499 THESIS RESEARCH
0 TO 2 UNITS

01600	CONF	ARR	STAFF

AVIATION

DEPARTMENT OFFICE 318 E H

COURSES OFFERED BY THE INSTITUTE OF AVIATION ARE OPEN TO STUDENTS AND FACULTY IN ALL DEPARTMENTS OF THE UNIVERSITY, SUBJECT TO LIMITATIONS IMPOSED BY THE AVAILABILITY OF SPACE AND EQUIPMENT. CREDIT FOR INSTITUTE OF AVIATION COURSES IS GENERAL UNIVERSITY CREDIT. HOWEVER, ITS USE AS CREDIT TOWARD GRADUATION IS A MATTER FOR EACH COLLEGE TO PASS UPON.

THE FEE FOR EACH INSTITUTE OF AVIATION FLIGHT COURSE IS $375. ARRANGEMENTS FOR THE PHYSICAL EXAMINATION FOR STUDENTS IN AVI. 101 ARE MADE BY THE INSTITUTE THROUGH THE UNIVERSITY HEALTH SERVICE UPON FINAL ACCEPTANCE IN THE PRIVATE PILOT COURSE AT REGISTRATION TIME. STUDENTS IN AVI. 104 ARE REQUIRED TO POSSESS A CURRENT SECOND CLASS F.A.A. MEDICAL CERTIFICATE AT THE TIME OF REGISTRATION

BUS TRANSPORTATION BETWEEN THE CAMPUS AND AIRPORT IS PROVIDED FREE OF CHARGE TO ALL STUDENTS REGISTERED IN AVIATION COURSES. THE DAILY BUS SCHEDULE, WITH ROUTINGS, IS LISTED SEPARATELY IMMEDIATELY FOLLOWING THE FLIGHT COURSES. STUDENTS MAY PROVIDE THEIR OWN TRANSPORTATION IF THEY WISH.

STUDENTS ARE CAUTIONED THAT ALL TIMES LISTED IN THE FOLLOWING FLIGHT SCHEDULES REFER TO AIRBORNE TIME AND THAT A MINIMUM OF 30 MINUTES MUST BE ALLOWED FOR TRAVELING TO THE AIRPORT PRIOR TO EACH FLIGHT AND FOR RETURNING TO THE CAMPUS AFTER EACH FLIGHT.

COURSES FOR UNDERGRADUATES

IN SOME CASES TWO OR MORE FLIGHT COURSES MAY BE TAKEN CONCURRENTLY BY SPECIAL PERMISSION.

AVI 101 PRIVATE PILOT.
3 HOURS

01618	LECT-DISC	A	750	MTUWTHF	400	E H		KUNDE
01626	LECT-DISC	B	3	MTUWTHF	400	E H		KUNDE
01634	FLT	F1	8-920	MTUWTHFS		AIRPORT		BENN AND
01642	FLT	F2	930-1050	MTUWTHFS		AIRPORT		STAFF
01651	FLT	F3	11-1220	MTUWTHFS		AIRPORT		
01669	FLT	F4	1-230	MTUWTHF		AIRPORT		
01677	FLT	F5	240-410	MTUWTHF		AIRPORT		
01685	FLT	F6	420-550	MTUWTHF		AIRPORT		

AVI 102 SECONDARY FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

01693	LECT-DISC		11	MTUWTHF	400	E H		GORDON
01707	FLT	F1	8-920	MTUWTHFS		AIRPORT		GORDON
01715	FLT	F4	1-230	MTUWTHF		AIRPORT		AND STAFF
01723	FLT	F5	240-410	MTUWTHF		AIRPORT		
01731	FLT	F6	420-550	MTUWTHF		AIRPORT		

AVI 103 INTERMEDIATE FLIGHT.
PREREQUISITE--AVI. 101 OR PRIVATE PILOT CERTIFICATE, CONSENT OF DIRECTOR.
3 HOURS

01740	LECT-DISC		12	MTUWTHF	400	E H		KUNDE
01758	FLT	X1	8-1130	M TH		AIRPORT		GORDON
01766	FLT	X2	130-530	M TH		AIRPORT		AND STAFF
01774	FLT	X3	8-1130	TU F		AIRPORT		
01782	FLT	X4	130-530	TU F		AIRPORT		
01791	FLT	X5	8-1130	W S		AIRPORT		

AVI 104 ADVANCED FLIGHT.
PREREQUISITE--AVI. 102 AND 103, CONSENT OF DIRECTOR.
3 HOURS

01804	LECT-DISC	A	10	MTUWTHF	400	E H		GORDON
01812	LECT-DISC	B	2	MTUWTHF	400	E H		KUNDE
01821	FLT	F1	8-920	MTUWTHFS		AIRPORT		GORDON
01839	FLT	F2	930-1050	MTUWTHFS		AIRPORT		AND STAFF
01847	FLT	F3	11-1220	MTUWTHFS		AIRPORT		
01855	FLT	F4	1-230	MTUWTHF		AIRPORT		
01863	FLT	F5	240-410	MTUWTHF		AIRPORT		
01871	FLT	F6	420-550	MTUWTHF		AIRPORT		

*THE FOLLOWING 104 SECTIONS ARE AVAILABLE ONLY TO STUDENTS CONCURRENTLY ENROLLED IN AVIATION 103. A STUDENT MUST SELECT THE SECTION WITH THE SAME NUMBER AS THE 103 SECTION THAT HE HAS SELECTED.

01880	FLT	*X1	8-1130	TUW F		AIRPORT		GORDON
01898	FLT	*X2	130-530	TUW F		AIRPORT		AND STAFF
01901	FLT	*X3	8-1130	M TH S		AIRPORT		
01910	FLT	*X4	130-530	M WTH		AIRPORT		

AVI 205 FLIGHT INSTRUCTOR.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

01928	LECT-DISC		9	MTUWTHF	400	E H	HAAK
01936	FLT	F3	11-1220	MTUWTHFS		AIRPORT	ANDERSON
01944	FLT	F4	1-230	MTUWTHF		AIRPORT	AND STAFF
01952	FLT	F5	240-410	MTUWTHF		AIRPORT	
01961	FLT	F6	420-550	MTUWTHF		AIRPORT	

AVI 206 BASIC INSTRUMENT FLIGHT TECHNIQUES.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, OR EQUIVALENT FLIGHT EXPERIENCE, JUNIOR STANDING, CONSENT OF DIRECTOR.
3 HOURS

01979	LECT-DISC		1	MTUWTHF	400	E H	HAAK
01987	FLT	F1	8-920	MTUWTHFS		AIRPORT	ANDERSON
01995	FLT	F2	930-1050	MTUWTHFS		AIRPORT	AND STAFF
02001	FLT	F3	11-1220	MTUWTHFS		AIRPORT	
02010	FLT	F5	240-410	MTUWTHF		AIRPORT	
02028	FLT	F6	420-550	MTUWTHF		AIRPORT	

AVI 207 ADVANCED INSTRUMENT FLIGHT PROCEDURES.
PREREQUISITE--AVI. 206 OR 40 HOURS OF SIMULATED INSTRUMENT FLIGHT EXPERIENCE, JUNIOR STANDING CONSENT OF DIRECTOR.
3 HOURS

02036	LECT-DISC		750	MTUWTHF	423	E H	HAAK
02044	FLT	F2	930-1050	MTUWTHFS		AIRPORT	ANDERSON
02052	FLT	F3	11-1220	MTUWTHFS		AIRPORT	AND STAFF
02061	FLT	F4	1-230	MTUWTHF		AIRPORT	
02079	FLT	F5	240-410	MTUWTHF		AIRPORT	
02087	FLT	F6	420-550	MTUWTHF		AIRPORT	

AVI 291 SPECIAL RATINGS AND/OR SPECIALIZED FLIGHT.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, CONSENT OF DIRECTOR.
1 HOUR

02095	LECT-DISC		ARR		AIRPORT	STONECIPHER
02109	FLT	F1	8-920	MTUWTHFS	AIRPORT	AND STAFF
02117	FLT	F2	930-1050	MTUWTHFS	AIRPORT	
02125	FLT	F3	11-1220	MTUWTHFS	AIRPORT	
02133	FLT	F4	1-230	MTUWTHF	AIRPORT	
02141	FLT	F5	240-410	MTUWTHF	AIRPORT	
02150	FLT	F6	420-550	MTUWTHF	AIRPORT	

AVI 292 SPECIAL RATING--MULTI-ENGINE LAND.
PREREQUISITE--COMMERCIAL PILOT CERTIFICATE, CONSENT OF DIRECTOR.
1 HOUR

02168	LECT-DISC		ARR		AIRPORT	STONECIPHER
02176	FLT	F1	8-920	MTUWTHFS	AIRPORT	AND STAFF
02184	FLT	F2	930-1050	MTUWTHFS	AIRPORT	
02192	FLT	F3	11-1220	MTUWTHFS	AIRPORT	
02206	FLT	F4	1-230	MTUWTHF	AIRPORT	
02214	FLT	F5	240-410	MTUWTHF	AIRPORT	
02222	FLT	F6	420-550	MTUWTHF	AIRPORT	

BUS SCHEDULE AND ROUTE

THE INSTITUTE OF AVIATION BUS MAKES REGULAR TRIPS BETWEEN THE AIRPORT AND THE CAMPUS BEGINNING ON THE FIRST DAY OF CLASSES AND CONTINUING THROUGH THE LAST DAY OF FINAL EXAMINATIONS. THE BUS LEAVES FROM THE CAMPUS PARKING LOCATION AT THE NORTH EAST CORNER OF AERO LAB B, AND MAKES REGULAR STOPS ON THE WAY TO THE AIRPORT AT THE CORNERS OF SIXTH AND ARMORY STREETS, FOURTH STREET AND GREGORY DRIVE, AND FIRST STREET AND GREGORY DRIVE. THE TRIP FROM THE AIRPORT BACK TO THE CAMPUS IS VIA GREGORY DRIVE AND GOODWIN AVENUE TO THE PARKING LOCATION. THE SCHEDULE IS AS FOLLOWS--

AVI 302 BUS FROM CAMPUS TO AIRPORT.
NO CREDIT

02231	BUS	A1	730-750	MTUWTHFS	CAMPUS
02249	BUS	A2	9-920	MTUWTHFS	CAMPUS
02257	BUS	A3	1030-1050	MTUWTHFS	CAMPUS
02265	BUS	A4	1210-1230	MTUWTHFS	CAMPUS
02273	BUS	A5	110-130	MTUWTHF	CAMPUS
02281	BUS	A6	210-230	MTUWTHF	CAMPUS
02290	BUS	A7	350-410	MTUWTHF	CAMPUS
02303	BUS	A8	450-510	MTUWTHF	CAMPUS
02311	BUS	A9	620-640	MTUWTHF	CAMPUS

AVI 303 BUS FROM AIRPORT TO CAMPUS.
NO CREDIT

02320	BUS	C1	830-850	MTUWTHFS	AIRPORT
02338	BUS	C2	930-950	MTUWTHFS	AIRPORT
02346	BUS	C3	1130-1150	MTUWTHFS	AIRPORT
02354	BUS	C4	1230-1250	MTUWTHFS	AIRPORT
02362	BUS	C5	130-150	MTUWTHF	AIRPORT
02371	BUS	C6	140-3	MTUWTHF	AIRPORT
02389	BUS	C7	430-450	MTUWTHF	AIRPORT
02397	BUS	C8	6-620	MTUWTHF	AIRPORT

AVIATION
AIRCRAFT MAINTENANCE

COURSES FOR UNDERGRADUATES

AVI 161 AIRPORT SHOP MANAGEMENT.
3 HOURS

02401	LECT-DISC	920-1010	MTUWTHF	AIRPORT	BAILEY

AVI 168 PROBLEMS OF AIRCRAFT MAINTENANCE.
PREREQUISITE--SOPHOMORE STANDING.
2 HOURS

02419	LECT-DISC	8-10	TU F	AIRPORT	APPLEGATE

BANDS

DEPARTMENT OFFICE 140 BAND

THE SUMMER SESSION BAND IS OPEN TO STUDENTS WHO HAVE BEEN MEMBERS OF THE UNIVERSITY BANDS DURING THE ACADEMIC YEAR, AND TO OTHER STUDENTS, BOTH MEN AND WOMEN, WHO MAY QUALIFY BY PLAYING EXAMINATION. FINAL SELECTION OF MEMBERSHIP IS BY INSTRUMENTATION AND PROFICIENCY. CANDIDATES SHOULD REPORT TO THE BANDS OFFICE, 140 BAND BUILDING, DURING THE REGISTRATION PERIOD FOR ENROLLMENT AND/OR APPOINTMENTS FOR AUDITIONS. REHEARSALS WILL BE HELD FROM 7.15 TO 8.45 MONDAY AND WEDNESDAY IN ROOM 141, BAND BUILDING, AND A SERIES OF TWILIGHT CONCERTS WILL BE SCHEDULED. CONDUCTOR--MR. EVERETT KISINGER.

BENGALI

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES

BENG 207 ELEMENTARY BENGALI.
8 HOURS
MEETS JUNE 20 THROUGH AUGUST 25.

02427	LECT-DISC	8-10	MTUWTHF	148	ADMIN
		1	MTUWTH	240	ADMIN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

BENG 307 INTERMEDIATE BENGALI.
PREREQUISITE--BENG. 207 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

02435	LECT-DISC	8-10	MTUWTH	252	ADMIN

BENG 309 ADVANCED BENGALI.
PREREQUISITE--BENG. 307 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

02443	LECT-DISC	10-12	MTUWTH	254	ADMIN

BIOLOGY

DEPARTMENT OFFICE 387 MOR HALL

COURSES FOR GRADUATES

BIOL 490 SPECIAL TOPICS IN BIOLOGY.
0 TO 1 UNIT

02451	CONF	ARR	STAFF

BIOL 499 THESIS RESEARCH.
0 TO 4 UNITS

02460	CONF	ARR	STAFF

BIOPHYSICS

DEPARTMENT OFFICE 524 BUR HALL

COURSES FOR GRADUATES

BIOPH 410 SPECIAL TOPICS IN BIOPHYSICS.
PREREQUISITE--BIOPH. 401 OR EQUIVALENT, BIOPH. 402 AND 403.
1/2 TO 1 UNIT

02478	CONF	ARR	STAFF

BIOPH 499 THESIS RESEARCH.
0 TO 2 UNITS

02486	CONF	ARR	STAFF

DEPARTMENT OFFICE 297 MOR HALL

MAJOR--TWENTY HOURS OF BOTANY EXCLUDING BOTANY 100, 101, BIOL. 110, 111, D.G.S. 131, AND 132, BUT INCLUDING BOT. 160, 302, 303, AND 330 OR THEIR EQUIVALENT. THE BALANCE OF THE MINIMUM OF TWENTY HOURS MUST BE TAKEN IN OTHER 300 LEVEL COURSES. BOT. 210 AND 381 ARE STRONGLY RECOMMENDED. IN ADDITION ONE SEMESTER EACH OF ORGANIC CHEMISTRY, PHYSICS AND ZOOLOGY WILL BE REQUIRED. ONE ADDITIONAL SEMESTER OF PHYSICAL SCIENCE IS ALSO REQUIRED, BUT THIS MAY BE SELECTED FROM COURSES IN PHYSICS OR GEOLOGY. CREDIT NOT TO EXCEED TWO HOURS IN BIOL. 203 AND 204 MAY BE INCLUDED IN THE TWENTY HOURS OF CREDIT FOR THE MAJOR.

MINORS--TWENTY HOURS IN ONE OR TWO SUBJECTS CHOSEN IN CONSULTATION WITH THE CHAIRMAN OF THE DEPARTMENT FROM THE FOLLOWING--AGRONOMY, CHEMISTRY, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, HORTICULTURE, MATHEMATICS, MICROBIOLOGY, PHYSICS, PHYSIOLOGY, PLANT PATHOLOGY, AND ZOOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

IF HORTICULTURE IS CHOSEN AS A MINOR, NOT MORE THAN TEN HOURS MAY BE COUNTED. THE TEN HOURS MAY BE CHOSEN FROM HORT. 100, 110, 121, 201, 230 OR 233, 242, 262, 307 OR 308, 321 OR 322, 367, AND 382.

NOTE--ATTENTION IS CALLED TO ADDITIONAL COURSE OFFERINGS LISTED UNDER BIOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

BOT 210 GENETICS.
SAME AS ZOOL. 210
PREREQUISITE--BOT. 100 AND ZOOL. 104 OR CONSENT OF INSTRUCTOR.
4 HOURS

02494	LECT	2	MTUWTHF	140	BUR HALL	DAWSON
	LAB-DISC	3	MTUWTHF	102	H H	DAWSON

BOT 293 HONORS.
PREREQUISITE--FIFTEEN HOURS OF BOTANY, SENIOR STANDING.
2 HOURS

02508	CONF	&	ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

BOT 300 INDIVIDUAL TOPICS.
PREREQUISITE--BOT. 100, TEN HOURS OF ADVANCED WORK IN BOTANY OR ANOTHER BIOLOGICAL SCIENCE, SENIOR STANDING.
*GRADUATE STUDENTS MAY OFFER 1 UNIT TOWARD M. S.
*2 TO 5 HOURS, OR 1/4 OR 1/2 UNIT

02516	CONF		ARR			STAFF

BOT 304 GENERAL PLANT MORPHOLOGY.
PREREQUISITE--BOT. 100 OR BIOL. 110 AND 111, OR D. G. S. 131 AND 132, OR EQUIVALENT--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN TO STUDENTS WITH CREDIT IN BOT 302 OR BOT 303.
5 HOURS OR 1 UNIT

02524	LAB-DISC	8-10	MTUWTHFS	306	N H B	PHILLIPS

BOT 345 PLANT ANATOMY.
PREREQUISITE--ONE YEAR OF BOTANY.
4 HOURS OR 1 UNIT

02532	LAB-DISC	10-12	MTUWTHFS	306	N H B	CAROTHERS

BOT 366 FIELD BOTANY.
PREREQUISITE--ONE COURSE IN BOTANY, CONSENT OF INSTRUCTOR.
3 OR 5 HOURS, OR 1/2 OR 1 UNIT
*FIELD WORK TWO HOURS TO BE ARRANGED.

02541	LAB-DISC	*1-3	MTUWTHF	304	N H B	BALBACH

COURSES FOR GRADUATES

BOT 493 ADVANCED STUDIES IN BOTANY.
* NOT MORE THAN 1 UNIT MAY BE APPLIED TOWARD THE GRADUATE COLLEGE M.S. DEGREE REQUIREMENT OF 3 UNITS OF COURSE WORK.
*1/2 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS--

A--ANATOMY	CAROTHERS, PAOLILLO
B--BRYOLOGY	JONES
C--CYTOGENETICS	STEFFENSEN
D--CYTOLOGY	STEFFENSEN
E--ECOLOGY	BAZZAZ, BLISS
F--GENETICS	LAUGHNAN
G--MORPHOGENESIS	PAOLILLO
H--MORPHOLOGY	CAROTHERS, PHILLIPS,
I--MYCOLOGY	ROGERS
J--PALEOBOTANY	PHILLIPS
K--PHOTOSYNTHESIS	GOVINDJEE, RABINOWITCH
L--PHYCOLOGY	HOFFMAN
M--PHYSIOLOGY	HANSON, NANCE
N--TAXONOMY	JONES, PAYNE
O--ULTRASTRUCTURE	CAROTHERS, HOFFMAN, AND PAOLILLO
P--VIROLOGY	BLACK, MACLEOD, REICHMAN

02559 LAB ARR STAFF

BOT 499 THESIS RESEARCH.
0 TO 2 UNITS
02567 LAB ARR STAFF

BUSINESS

DEPARTMENT OFFICE 360 COM W

COURSES FOR GRADUATES

BUS 499 THESIS RESEARCH
0 TO 2 UNITS
02575 CONF 2-4 W 120 COM W DE MARIS

BUSINESS ADMINISTRATION

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION--260 COM W

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ADM 373 ELECTRONIC DATA PROCESSING FOR BUSINESS.
PREREQUISITE--ECON. 170, ACCY. 106 OR 108.
3 HOURS, OR 1/2 OR 1 UNIT
02583 LECT-DISC 3-415 MTU THF 226 COM W

COURSES FOR GRADUATES

B ADM 511 BUSINESS ORGANIZATION.
PREREQUISITE--B. ADM. 510.
3/4 UNIT
02591 LECT-DISC 8-10 MTU THF 241 COM W

B ADM 531 INTRODUCTION TO PRODUCTION.
PREREQUISITE--FIRST SEMESTER OF THE M. B. A. PROGRAM.
3/4 UNIT
02605 LECT-DISC 1-3 MTU THF 241 COM W

B ADM 544 EXECUTIVE POLICIES AND PLANNING.
PREREQUISITE--FIRST YEAR MASTER OF BUSINESS ADMINISTRATION COURSES OR EQUIVALENT.
1 UNIT

02613	LECT-DISC	10-12	MTU THF	236	COM W

B ADM 545 BUSINESS LOGISTICS.
PREREQUISITE--SECOND YEAR M.B.A. STANDING OR CONSENT OF INSTRUCTOR.
3/4 UNIT

02621	LECT-DISC	1-3	MTU THF	91	COM W

B ADM 551 FINANCIAL ANALYSIS.
PREREQUISITE--ENROLLMENT IN THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT

02630	LECT-DISC	10-12	MTU THF	241	COM W

B ADM 570 MATHEMATICAL ANALYSIS FOR BUSINESS DECISIONS.
PREREQUISITE--REGISTRATION IN THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION.
3/4 UNIT

02648	LECT-DISC	1-3	MTU THF	236	COM W

B ADM 583 INTERNATIONAL BUSINESS OPERATIONS, II.
PREREQUISITE--B. ADM. 582.
3/4 UNIT

02656	LECT-DISC	8-10	MTU THF	236	COM W

B ADM 590 INDEPENDENT STUDY AND RESEARCH.
1/2 TO 1 UNIT

02664	CONF	ARR

B ADM 599 THESIS RESEARCH.
0 TO 2 UNITS

02672	CONF	ARR

BUSINESS EDUCATION

DEPARTMENT OFFICE 117 D K H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

B ED 383 PROBLEMS IN COOPERATIVE EDUCATION.
PREREQUISITE--SIXTEEN HOURS IN EDUCATION AND SIXTEEN IN COMMERCE, AND CONSENT OF INSTRUCTOR.
4 HOURS OR 1 UNIT
THIS IS AN EXTRAMURAL COURSE--PROBLEMS IN COOPERATIVE EDUCATION. STUDENTS APPLY FOR AND SECURE DISTRIBUTIVE OR OFFICE POSITIONS WITH SELECTED COOPERATING BUSINESS FIRMS. WHILE REGULARLY EMPLOYED IN THESE SUPERVISED POSITIONS, THEY OBSERVE THE RELATIONSHIPS BETWEEN THOSE ACTIVITIES AND THE COOPERATIVE BUSINESS EDUCATION PROGRAMS IN THE HIGH SCHOOL. THESE RELATIONSHIPS ARE POINTED UP THROUGH WORKSHOP SESSIONS WHERE EMPHASIS IS PLACED ON JOB ANALYSIS, CURRENT TRENDS, WAGE AND BENEFIT STRUCTURE, PERSONNEL PRACTICES, AND LABOR RELATIONS. THESE WORKSHOP SESSIONS MEET DURING THE FIRST AND LAST WEEK OF THE SUMMER SESSION IN THE INDICATED ROOM.

02681	LECT-DISC	1-5	MTUWTHF	152	COM W	LONG

BUSINESS LAW

SEE INDUSTRIAL ADMINISTRATION

CERAMIC ENGINEERING

DEPARTMENT OFFICE 203 CER

COURSES FOR ADVANCED UNDERGRADUATES

CER E 299 SENIOR THESIS.
PREREQUISITE--SENIOR STANDING AND A GRADE POINT AVERAGE OF 4.0 OR BETTER.
*STUDENTS MAY REGISTER MORE THAN ONCE FOR A MAXIMUM OF FIVE HOURS. TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED.
*1 TO 5 HOURS

02699	CONF	ARR	STAFF

COURSES FOR GRADUATES

CER E 495 MATERIALS AND SPECIAL PROBLEMS.
PREREQUISITE--GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 2 UNITS

02702	CONF	ARR	STAFF

INSTRUCTORS-BERGERON, COOK, FRIEDBERG, TENNERY

CER E 499 THESIS RESEARCH.
PREREQUISITE--CER. E. 311, GRADUATE STANDING IN CERAMIC ENGINEERING.
0 TO 2 UNITS

02711	CONF	ARR	STAFF

INSTRUCTORS-BERGERON, COOK, FRIEDBERG, TENNERY

CHEMISTRY AND CHEMICAL ENGINEERING

DEPARTMENT OFFICE 106 N L

CHEMISTRY CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

CHEMISTRY MAJORS IN THE SCIENCES AND LETTERS CURRICULUM--SEE UNDERGRADUATE COURSES CATALOG.

CHEMISTRY

COURSES FOR UNDERGRADUATES

CHEM 102 GENERAL CHEMISTRY.
PREREQUISITE--ONE UNIT OF HIGH SCHOOL CHEMISTRY OR EQUIVALENT, 2 1/2 UNITS OF HIGH SCHOOL MATHEMATICS OR CREDIT IN MATH. 111 OR 112.
3 HOURS

02729	LECT	2	MTUWTH	138	ADMIN
	QUIZ	1	MTUWTH	138	ADMIN
	LAB	10-12	TU TH	201	C A

CHEM 122 ELEMENTARY QUANTITATIVE ANALYSIS.
FOR ALL STUDENTS IN HOME ECONOMICS AND PREMEDICAL COURSES AND ALL OTHERS WHO HAVE NOT FOLLOWED THE SEQUENCE CHEM. 101 OR 102, 107 AND 108.
PREREQUISITE--CHEM. 104, 105, OR 109.
5 HOURS

02737	LECT	11	MTU THF	111	N L
	QUIZ	11	W S	111	N L
	LAB	8-11	MTUWTHFS	301	C A

CHEM 123 QUANTITATIVE ANALYSIS FOR ENGINEERS.
PREREQUISITE--CHEM. 104, 105, OR 109.
3 HOURS

02745	LECT	11	MTU THF	111	N L
	LAB	8-11	M W	301	C A

CHEM 132 ELEMENTARY ORGANIC CHEMISTRY.
PREREQUISITE--CHEM. 101, 102, 109, OR EQUIVALENT.
3 HOURS

02753	LECT	8	TUWTHF	161	N L
	QUIZ	1	TU TH	161	N L
	LAB	2-5	TU TH	467	N L

CHEM 133 ELEMENTARY ORGANIC CHEMISTRY.
FOR STUDENTS IN AGRICULTURAL SCIENCE, DAIRY TECHNOLOGY, FOOD TECHNOLOGY, NUTRITION, DIETETICS, AND PREMEDICAL, PREDENTAL AND PREVETERINARY COURSES.
PREREQUISITE--CHEM 105 OR 108 OR 109.
5 HOURS

02761	LECT	9	MTU THF	112	C A
	QUIZ	9	W S	112	C A
	CONF	1	W F	112	C A
	LAB	2-5	W F	467	N L
		1-5	M	467	N L

COURSES FOR ADVANCED UNDERGRADUATES

CHEM 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMISTRY CURRICULUM.
PREREQUISITE--MAJORS IN CHEMISTRY IN THE GENERAL CURRICULUM MAY REGISTER IF THEY HAVE COMPLETED A MINIMUM OF TWENTY-THREE HOURS OF CHEMISTRY, WHICH MUST INCLUDE AT LEAST FIVE HOURS FROM THE COURSES FOR ADVANCED UNDERGRADUATES. OTHER STUDENTS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT. EACH STUDENT WHO DESIRES TO DO RESEARCH MUST RECEIVE SPECIAL WRITTEN PERMISSION FROM THE INSTRUCTOR UNDER WHOM HE WISHES TO WORK. SUCH WRITTEN PERMISSION SHOULD BE PRESENTED, AT THE TIME OF REGISTRATION, TO THE ADVISER FOR THE CHEMISTS. EACH STUDENT TAKING THIS COURSE MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. IN ORDER TO RECEIVE CREDIT A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CHEM. 290.
2 TO 6 HOURS

02770	CONF	ARR			STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CHEM 315 INORGANIC CHEMISTRY.
PREREQUISITE--CREDIT OR REGISTRATION IN PHYSICAL CHEMISTRY.
3 HOURS OR 3/4 UNIT

02788	LECT	11	MTUWTHF	138	ADMIN
		4	TU	138	ADMIN

CHEM 321 CHEMICAL AND INSTRUMENTAL ANALYSIS.
PREREQUISITE--CHEM. 336, AND 340 OR 342 WITH CONCURRENT REGISTRATION IN CHEM. 343 AND 344.
5 HOURS, OR 3/4 OR 1 1/4 UNITS

02796	LECT		8	MTUWTHFS	162	N L
02800	LAB	A	9-12	MTUW	176	E C
		A	1-5	MTU	176	E C
02818	LAB	B	1-4	W	176	E C
		B	9-12	THF	176	E C
		B	1-5	THF	176	E C

CHEM 342 PHYSICAL CHEMISTRY.
PREREQUISITE--CHEM. 108, 122, 123, OR EQUIVALENT, PHYCS. 106, 107, AND 108, OR TWO SEMESTERS OF GENERAL PHYSICS WITH CONCURRENT REGISTRATION IN THE THIRD SEMESTER, CREDIT OR REGISTRATION IN MATH 142 OR EQUIVALENT. STUDENTS SHOULD NOT REGISTER IN 342 WHO DO NOT INTEND TO ENROLL IN 344.
3 HOURS OR 3/4 UNIT

02826	LECT	9	MTUWTHFS	161	N L

CHEM 350 GENERAL BIOCHEMISTRY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY AND CHEM. 133 OR 234, OR EQUIVALENTS.
3 HOURS OR 3/4 UNIT

02834	LECT	8	MTUWTHFS	115	E C	

CHEM 355 BIOCHEMISTRY LABORATORY.
PREREQUISITE--QUANTITATIVE ANALYTICAL CHEMISTRY, CHEM. 133 OR 234, OR EQUIVALENT, REGISTRATION IN CHEM. 350.
3 HOURS OR 3/4 UNIT

02842	LAB	9-12	MTUWTHF	318	E C	

CHEM 397 RADIOCHEMISTRY.
SAME AS NUC. E. 397.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY, OR ONE SEMESTER OF ATOMIC PHYSICS, OR CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED.

02851	LECT	*9	MTUWTHF	254	ADMIN	VAN HISE

COURSES FOR GRADUATES

CHEM 405 INORGANIC CHEMISTRY SEMINAR.
REQUIRED OF ALL GRADUATE STUDENTS MAJORING IN INORGANIC CHEMISTRY.
1/4 UNIT

02869	LECT-DISC	9	TU TH	193	E C	

CHEM 455 BIOCHEMISTRY SEMINAR.
REQUIRED OF GRADUATE STUDENTS WHOSE MAJOR IS BIOCHEMISTRY.
PREREQUISITE--CHEM. 350 AND 355, OR EQUIVALENT.
1/2 UNIT

02877	LECT-DISC	10-12	TU TH	116	E C	

CHEM 499 THESIS RESEARCH.
0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING FIELDS, SUBJECT TO THE APPROVAL OF ONE OF THE QUALIFIED STAFF MEMBERS-
ANALYTICAL CHEMISTRY . . . HARTLEY, JONAS, JUVET, LAITINEN, MALMSTADT.
BIOCHEMISTRY . . . CARTER, CLARK, CONRAD, GUNSALUS, HAGER, SPIEGELMAN, SCHROEPFER, WEBER, WOOD.
BIOPHYSICAL CHEMISTRY . . . BLOOMFIELD, PAUL, VAN HOLDE, WEBER, WOODY.
INORGANIC CHEMISTRY . . . BAILAR, BEATTIE, BROWN, DENNING, DRAGO, HAIGHT, MOELLER, STUCKY, L J TODD.
ORGANIC CHEMISTRY . . . APPLEQUIST, BALDWIN, BEAK, COATES, CURTIN, LEONARD, MARTIN, PAUL, PIRKLE, RINEHART, SMITH, SNYDER
PHYSICAL CHEMISTRY . BELFORD, BLOOMFIELD, DRICKAMER, FLYGARE, GOODISMAN, GUTOWSKY, HUMMEL, JONAS, MARCUS, PAUL, SECREST, VAN HOLDE, WOODY, YANKWICH
APPLIED ELECTROCHEMISTRY--ORGANIC AND INORGANIC . . . SWANN
RADIO CHEMISTRY . . . HUMMEL, NYSTROM
RESEARCH FOR THE PH. D. IS ALSO OFFERED IN SPECIALIZED FIELDS OTHER THAN THOSE ILLUSTRATED ABOVE. STUDENTS WHO INTEND TO MAJOR IN CHEMISTRY IN ONE OF THESE SPECIAL FIELDS SHOULD CONSULT WITH THE PROFESSOR IN CHARGE OF THE THESIS AND WITH THE HEAD OF THE DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING IN REGARD TO THE PROGRAMS OF COURSES AND EXAMINATIONS.

02885	CONF	ARR				STAFF

CHEMICAL ENGINEERING

COURSES FOR ADVANCED UNDERGRADUATES

CH E 290 THESIS.
LIMITED IN GENERAL TO SENIORS IN THE CHEMICAL ENGINEERING CURRICULUM. ANY OTHERS MUST HAVE THE CONSENT OF THE HEAD OF THE DEPARTMENT.
*EACH STUDENT MUST REGISTER IN A MINIMUM OF FIVE HOURS EITHER IN ONE SEMESTER OR DIVIDED OVER TWO SEMESTERS. A MAXIMUM REGISTRATION OF TEN HOURS IN TWO SEMESTERS IS PERMITTED. HOWEVER, CH. E. 379 TWO HOURS, MAY BE SUBSTITUTED FOR TWO OF THE FIVE HOURS REQUIRED IN CH. E. 290. IN ORDER TO RECEIVE CREDIT, A THESIS MUST BE PRESENTED BY EACH STUDENT REGISTERED IN CH. E. 290.
*2 TO 6 HOURS

02893	CONF	ARR					STAFF

COURSES FOR GRADUATES

CH E 488 ADVANCED TOPICS IN HEAT AND MASS TRANSFER.
PREREQUISITE--CH. E. 464 OR CONSENT OF INSTRUCTOR.
3/4 OR 1 UNIT

02907	LECT	11	MTUWTH	193	E C		HUDSON

CH E 499 THESIS RESEARCH.
0 TO 2 UNITS
INSTRUCTORS--DRICKAMER, ECKERT, HANRATTY, HUDSON, QUINN, SANI, SWANN, SCHMITZ, WESTWATER.

02915	CONF	ARR					STAFF

CIVIL ENGINEERING

DEPARTMENT OFFICE 203 E H

COURSES FOR ADVANCED UNDERGRADUATES

C E 230 INTRODUCTION TO TRANSPORTATION ENGINEERING.
PREREQUISITE--JUNIOR STANDING IN ENGINEERING, ARCHITECTURE OR CITY PLANNING, OR CONSENT OF INSTRUCTOR.
3 HOURS

02923	LECT-DISC	E	11	MTUWTHFS	163	E E B	

C E 262 STRUCTURAL THEORY, II.
PREREQUISITE--C. E. 261.
3 HOURS

02931	LECT-DISC	E	10	MTUWTHFS	163	E E B	

C E 263 BEHAVIOR AND DESIGN OF METAL STRUCTURES, I.
PREREQUISITE--T.A.M. 224 AND C.E. 261, OR CONSENT OF INSTRUCTOR.
3 HOURS

02940	LECT-DISC	E	8	MTUWTHFS	163	E E B	

C E 264 REINFORCED CONCRETE DESIGN, I.
PREREQUISITE--C. E. 214, C. E. 261, T. A. M. 224.
3 HOURS
NOTE--THREE-TWO HOUR DEMONSTRATION LABORATORIES TO BE ARRANGED.
*SECTION F IS A SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 14 FOR MILITARY STUDENTS ONLY.

02958	LECT-DISC	E	9	MTUWTHFS	163	E E B	
02966	LECT-DISC	*F	ARR				

C E 290 CONTRACTS AND SPECIFICATIONS.
SAME AS G. E. 290.
PREREQUISITE--SENIOR STANDING IN ENGINEERING OR ARCHITECTURE.
*CREDIT IS NOT GIVEN FOR C. E. 290 IN ADDITION TO G. E. 292
*3 HOURS
SPECIAL FOUR-WEEK COURSE BEGINNING AUGUST 14 FOR MILITARY STUDENTS ONLY.
02974 LECT-DISC E ARR

C E 297 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING.
1 TO 4 HOURS
02982 CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C E 366 BEHAVIOR OF REINFORCED CONCRETE MEMBERS.
PREREQUISITE--UNDERGRADUATES-SENIOR STANDING AND C.E. 264, GRAD STUDENTS-B.S.DEGREE IN C.E. OR ARCHITECTURE WITH COURSES IN STRUCTURES AND REINFORCED CONCRETE DESIGN.
4 HOURS OR 1 UNIT
02991 LECT-DISC E 1-3 M W F 163 E E B SIESS

C E 368 PRESTRESSED CONCRETE.
PREREQUISITE--C. E. 262, 264.
3 HOURS, OR 3/4 OR 1 UNIT
03007 LECT-DISC E 11 MTUWTHFS 161 E E B KHACHATURIAN

C E 380 FOUNDATION ENGINEERING.
PREREQUISITE--C E 210, SENIOR STANDING.
3 HOURS OR 1 UNIT
03015 LECT-DISC E 8 MTUWTHFS 162 E E B THORNBURN

C E 383 SOIL MECHANICS.
UNDERGRADUATE PREREQUISITE--C.E. 210, SENIOR STANDING AND CONSENT OF INSTRUCTOR. GRADUATE PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT
03023 LECT-DISC E 11 MTUWTHFS 162 E E B IRELAND

C E 391 COMPUTER METHODS IN CIVIL ENGINEERING.
PREREQUISITE--MATH. 195 OR EQUIVALENT--SENIOR OR GRADUATE STANDING IN CIVIL ENGINEERING OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
03031 LECT-DISC E 9 MTUWTHFS 161 E E B BOYER

COURSES FOR GRADUATES

C E 461 STRUCTURAL THEORY AND DESIGN.
PREREQUISITE--B.S. IN C.E., AND C.E. 361, OR C.E. 460, OR EQUIVALENT.
1 UNIT
03040 LECT-DISC E 11 MTUWTHF 168 E E B HALL

C E 465 STRUCTURAL DESIGN IN METALS.
PREREQUISITE--B.S. IN ENGINEERING WITH COURSES IN STRUCTURES.
1 UNIT
03058 LECT-DISC E 10 MTUWTHF 161 E E B GAYLORD

C E 471 NUMERICAL AND APPROXIMATE METHODS OF STRUCTURAL ANALYSIS.
1 TO 2 UNITS
03066 LECT-DISC E 9 MTUWTHF 162 E E B EUBANKS

C E 475 BEHAVIOR OF STEEL STRUCTURES.
PREREQUISITE--GRADUATE STANDING IN C.E. OR T.A.M.
1 UNIT
03074 LECT-DISC E 8 MTUWTHF 161 E E B MUNSE
BIRKEMOE

C E 484 FOUNDATION ENGINEERING.
PREREQUISITE--C. E. 384.
1 UNIT

03082	LECT-DISC	E	2	MTUWTHF	161	E E B		PECK

C E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 4 UNITS
*SECTION S--ADVANCED ANALYTICAL PHOTOGRAMMETRY - 2 UNITS.

03091	CONF	O	ARR					STAFF
03104	CONF	*S	9-11	MTUWTHF	212	WOODSHOP		KARARA

C E 499 THESIS RESEARCH.
0 TO 2 UNITS
*SECTION-M-IS FOR MASTERS DEGREE, *SECTION-D-IS FOR PH.D. DEGREE.

03112	CONF	*D	ARR					STAFF
03121	CONF	*M	ARR					STAFF

CLASSICS

DEPARTMENT OFFICE 361 L H

CLASSICAL CIVILIZATION

NOTE--THE FOLLOWING COURSES PRESUPPOSE NO KNOWLEDGE OF THE GREEK OR LATIN LANGUAGE AND ARE OPEN TO ALL STUDENTS. FOR OTHER COURSES IN THE AREA OF CLASSICAL CIVILIZATION SEE ARCH. 113, ART 311, HIST. 181, 182, 381, 382, 383, AND 384, AND PHIL. 303 AND 309.

COURSES FOR UNDERGRADUATES

CLCIV 111 MYTHOLOGY OF GREECE AND ROME.
2 HOURS

03139	LECT-DISC	A	8	TUWTHF	362	L H		CASHDOLLAR

COMMUNICATIONS

DEPARTMENT OFFICE 119 G H

THE GRADUATE PROGRAM LEADING TO THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATIONS IS ADMINISTERED BY AN INTERDISCIPLINARY COMMITTEE APPOINTED BY THE DEAN OF THE GRADUATE COLLEGE. STUDENTS SEEKING ADMISSION TO THIS PROGRAM SHOULD CONSULT THEODORE PETERSON, CHAIRMAN OF THE COMMITTEE.

COURSES FOR GRADUATES

COMM 470 COMMUNICATIONS AND POPULAR CULTURE.
SAME AS JOURN. 470.
1 UNIT

03147	LECT-DISC	N	10-12	TU TH	123	G H		SCHACHT

COMM 482 RESEARCH METHODS IN ADVERTISING AND COMMUNICATIONS.
SAME AS ADV. 482.
1 UNIT

03155	LECT-DISC		10-12	M W	123	G H		DUNN

COMM 483 ADVERTISING AND THE MASS MEDIA.
SAME AS ADV. 483.
1 UNIT

03163	LECT-DISC		8-10	TU TH	123	G H		MOYER

COMM 490 SPECIAL TOPICS IN COMMUNICATIONS.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS.
1/2 TO 2 UNITS

03171	CONF		ARR					STAFF

COMM 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF CHAIRMAN OF COMMITTEE ON GRADUATE STUDY IN COMMUNICATIONS AND THESIS SUPERVISOR.
*STUDENTS MAY ACCUMULATE A TOTAL OF 8 UNITS.
*0 TO 2 UNITS

03180	CONF		ARR					STAFF

COMPARATIVE LITERATURE

DEPARTMENT OFFICE 401 L H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C LIT 361 SOUTH ASIAN LITERATURES.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

03198	LECT-DISC		4	MTUWTHF	111	G H		

COURSES FOR GRADUATES

C LIT 461 SEMINAR IN LITERARY FORMS AND TYPES.
PREREQUISITE--C. LIT. 401.
*STUDENTS MAY ACCUMULATE 3 UNITS.
*1 UNIT
*SECTION C--THEORY OF THE NOVEL.

03201	LECT-DISC	*C	3-5	M W	304	G H		JOST

C LIT 493 SPECIAL STUDIES.
1 UNIT

03210	CONF		ARR					

C LIT 499 THESIS RESEARCH.
0 TO 4 UNITS

03228	CONF		ARR					

COMPUTER SCIENCE

DEPARTMENT OFFICE 252D D C L

COURSES FOR UNDERGRADUATES

C S 101 INTRODUCTION TO AUTOMATIC DIGITAL COMPUTING.
PREREQUISITE--SOPHOMORE STANDING AND ONE YEAR OF COLLEGE MATHEMATICS, INCLUDING DIFFERENTIAL CALCULUS.
3 HOURS
GRADUATE STUDENTS DESIRING AN ELEMENTARY KNOWLEDGE OF PROGRAMMING SHOULD ENROLL IN COMPUTER SCIENCE 400.

03236	LECT-DISC	C1	10-12	M W F	151	E E B		MURRELL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

C S 387 INTRODUCTION TO NUMERICAL ANALYSIS.
SAME AS MATH. 387.
PREREQUISITE--C. S. 101 OR MATH. 195 AND A COURSE IN DIFFERENTIAL EQUATIONS, OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

03244	LECT-DISC	B1	9	MTUWTHF	247	A H		NIEVERGELT
		B1	3	W	247	A H		NIEVERGELT

COURSES FOR GRADUATES

C S 400 INTRODUCTION TO AUTOMATIC DIGITAL COMPUTING FOR GRADUATE STUDENTS.
1 HOUR
03252 LECT 1-3 TH 151 E E B RAY

DAIRY SCIENCE

DEPARTMENT OFFICE 315 A S L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

D S 300 SPECIAL PROBLEMS.
PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5--NOT OPEN TO STUDENTS ON PROBATION-SENIOR STANDING-CONSENT OF INSTRUCTOR AND HEAD OF DEPARTMENT.
3 TO 5 HOURS, OR 1/2 OR 1 UNIT
SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
03261 CONF ARR SALISBURY AND STAFF

COURSES FOR GRADUATES

D S 493 SPECIAL PROBLEMS.
1/2 TO 2 UNITS
03279 CONF ARR SALISBURY AND STAFF

D S 499 THESIS RESEARCH.
0 TO 2 UNITS
03287 CONF ARR SALISBURY AND STAFF

DAIRY TECHNOLOGY
SEE FOOD SCIENCE

DANCE

DEPARTMENT OFFICE 126A W GYM

COURSES FOR ADVANCED UNDERGRAUDATES AND GRADUATES

DANCE 345 DANCE PRODUCTION WORKSHOP.
PREREQUISITE--SENIOR OR GRADUATE STANDING, DANCE 164 OR EQUIVALENT AND/OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT
03295 LAB 7PM MTUWTH 10 W GYM PALUDAN, WARD

DIVISION OF GENERAL STUDIES L A S

DEPARTMENT OFFICE 221 A H

COURSES FOR UNDERGRADUATES

D G S 111 VERBAL COMMUNICATION.
4 HOURS

03309	LECT-DISC	C	10-12	MTUWTH	141	A H	THOMAS

D G S 141 PHYSICAL SCIENCE, I.
4 HOURS

03317	LECT		1	MTUWTH	143	A H	ROSEN
03325	DISC	A	2	M W	143	A H	
	LAB	A	2-4	TU TH	216	N L	
03333	DISC	B	2	TU TH	143	A H	
	LAB	B	2-4	M W	216	N L	

ECONOMICS

DEPARTMENT OFFICE 330 COM W

MAJOR--FOR L A S STUDENTS WHO ENTERED THE UNIVERSITY SEPTEMBER, 1964, AND AFTER--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108- OR 102 AND 103-171, 300, AND 301. MATH. 124 AND 134 OR MATH. 132 ARE ALSO REQUIRED BUT ARE NOT ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR. LIBERAL ARTS MAJORS ARE STRONGLY ADVISED TO ELECT ACCY 201, WHICH IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

FOR L A S STUDENTS WHO ENTERED THE UNIVERSITY BEFORE SEPTEMBER, 1964--TWENTY HOURS IN ECONOMICS, INCLUDING ECON. 108 OR 102 AND 103, AND ECON. 300 AND 301. LIBERAL ARTS MAJORS IN ECONOMICS ARE STRONGLY ADVISED TO ELECT ECON. 171 AND ACCY 201. ECON. 171 IS ACCEPTABLE TOWARD THE TWENTY-HOUR MAJOR, BUT ACCY. 201 IS NOT ACCEPTABLE TOWARD THE MAJOR REQUIREMENT.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, EDUCATION, FINANCE, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY. AN ECONOMICS MAJOR WHO CHOOSES FINANCE AS A MINOR MUST INCLUDE TWELVE HOURS IN A SECOND MINOR. THE CURRICULUM IN LATIN-AMERICAN OR RUSSIAN AREA STUDIES IS ACCEPTED AS A MINOR.

NOTE--ECON. 102 AND 103 ARE REQUIRED FOR ALL COMMERCE STUDENTS, AND THESE OR 108 ARE REQUIRED FOR ALL LIBERAL ARTS MAJORS IN ECONOMICS. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN ECONOMICS SHOULD TAKE THESE COURSES IN THEIR SOPHOMORE YEAR.

COURSES FOR UNDERGRADUATES

ECON 102 PRINCIPLES OF ECONOMICS, I.
PREREQUISITE--ONE SEMESTER OF UNIVERSITY WORK
3 HOURS

03341	LECT-DISC	A	8	MTUWTHF	94	COM W
		A	3	W	94	COM W

ECON 103 PRINCIPLES OF ECONOMICS, II.
PREREQUISITE--ECON. 102.
3 HOURS

03350	LECT-DISC	A	8	MTUWTHF	40	COM W
		A	3	TU	40	COM W

ECON 108 ELEMENTS OF ECONOMICS.
NOT OPEN TO COMMERCE STUDENTS OR STUDENTS WHO HAVE HAD ECON. 102 AND 103.
PREREQUISITE--FIRST SEMESTER FRESHMAN IN ENGINEERING, SECOND SEMESTER FRESHMAN IN OTHER COLLEGES.
3 HOURS

03368	LECT-DISC	B	9	MTUWTHF	40	COM W
		B	3	W	40	COM W
03376	LECT-DISC	D	11	MTUWTHF	130	COM W
		D	3	TU	130	COM W

ECON 172 ECONOMIC STATISTICS, I.
PREREQUISITE--CREDIT OR REGISTRATION OR EQUIVALENT IN ECON. 102, OR 108, AND MATH. 134.
3 HOURS

03384	LECT-DISC	B	9	MTUWTHF	130	COM W
		B	3	W	205	D K H
		B	3	TH	130	COM W

ECON 173 ECONOMIC STATISTICS, II.
PREREQUISITE--ECON. 172 OR EQUIVALENT.
3 HOURS

03392	LECT-DISC	C	10	MTUWTHF	130	COM W
		C	3	W	130	COM W
		C	3	TH	205	D K H

COURSES FOR ADVANCED UNDERGRADUATES

ECON 200 ECONOMIC ANALYSIS FOR BUSINESS.
PREREQUISITE--ECON. 103, MATH. 134 OR EQUIVALENT, AND CREDIT OR REGISTRATION IN ECON. 173 OR EQUIVALENT.
3 HOURS

03406	LECT-DISC	D	11	MTUWTHF	94	COM W
		D	3	TH	94	COM W

ECON 214 GOVERNMENT FINANCE AND TAXATION.
PREREQUISITE--ECON. 103, OR 108.
3 HOURS

03414	LECT-DISC	B	9	MTUWTHF	111	D K H
		B	3	W	111	D K H

ECON 236 AMERICAN ECONOMIC HISTORY.
PREREQUISITE--JUNIOR STANDING, ECON. 103 OR 108.
3 HOURS

03422	LECT-DISC	E	2	MTUWTHF	111	D K H
		E	8	TH	111	D K H

ECON 255 COMPARATIVE ECONOMIC SYSTEMS.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS

03431	LECT-DISC	C	10	MTUWTHF	40	COM W
		C	3	TH	40	COM W

ECON 288 GOVERNMENT REGULATION OF ECONOMIC ACTIVITY.
PREREQUISITE--ECON. 102 AND 103, OR 108.
3 HOURS

03449	LECT-DISC	E	1	MTUWTHF	140	COM W
		E	8	TU	140	COM W

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ECON 301 INTERMEDIATE MACRO-ECONOMIC THEORY.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS OR 1/2 UNIT

03457	LECT-DISC	D	11	MTUWTHF	243	COM W
		D	8	W	243	COM W

ECON 374 OPERATIONS RESEARCH.
PREREQUISITE--ECON. 170 AND I. ADM. 101, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

03465	LECT-DISC		9	MTUWTHF	243	COM W
			3	W	243	COM W

COURSES FOR GRADUATES

ECON 400 GENERAL ECONOMIC THEORY.
PREREQUISITE--ECON. 103 OR 108.
1 UNIT
*ENROLLMENT RESTRICTED TO STUDENTS IN THE NATIONAL SCIENCE FOUNDATION SUMMER INSTITUTE IN ECONOMICS.

03473	LECT-DISC	*A	8-1030	M W F	240	COM W	

ECON 438 ECONOMIC HISTORY OF EUROPE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

03481	LECT-DISC	C	10-12	M TH	111	D K H	

ECON 450 THE ECONOMICS OF DEVELOPMENT AND GROWTH.
PREREQUISITE--ECON. 300 AND 301 OR EQUIVALENT.
1 UNIT
*ENROLLMENT RESTRICTED TO STUDENTS IN THE NATIONAL SCIENCE FOUNDATION SUMMER INSTITUTE IN ECONOMICS.

03490	LECT-DISC	*C	1030-1230	M W F	240	COM W	

ECON 470 ECONOMIC STATISTICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
*ENROLLMENT RESTRICTED TO STUDENTS IN THE NATIONAL SCIENCE FOUNDATION SUMMER INSTITUTE IN ECONOMICS FOR 1/2 UNIT CREDIT.
SECTION C 1 UNIT OF CREDIT ONLY.

03511	LECT-DISC	*A	8-1230	TU TH	240	COM W	
03503	LECT-DISC	C	10-12	MTUWTH	140	COM W	

ECON 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT

03520	DISC		ARR				

ECON 499 THESIS RESEARCH.
0 TO 2 UNITS

03538	LECT-DISC		10-12	F	140	COM W	

EDUCATION ADMINISTRATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR GRADUATES

ED AD 430 ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
MEETS FIRST FOUR WEEKS ONLY.

03546	LECT-DISC		9-11	TUWTHF	385	EDUC	SPRINGER

ED AD 438 INSTRUCTIONAL SUPERVISION.
PREREQUISITE--EL. ED. OR SE. ED. 439 AND ED. AD. 460.
1 UNIT

03554	LECT-DISC	A	8	TUWTHF	137	ARMORY	
03562	LECT-DISC	B	9	TUWTHF	162	EDUC	MCCLEARY

ED AD 440 ADMINISTRATION AND SUPERVISION OF JUNIOR AND SENIOR HIGH SCHOOLS.
PREREQUISITE--ED. AD. 460 OR CONSENT OF INSTRUCTOR.
1 UNIT
*MEETS FIRST FOUR WEEKS ONLY.

03571	LECT-DISC		*9-11	TUWTHF	134	ARMORY	ROWE

ED AD 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

03589	CONF		ARR				STAFF

ED AD 460 PUBLIC CONTROL AND ADMINISTRATION OF EDUCATION.
NOT OPEN TO EXPERIENCED ADMINISTRATORS OR TO ANY STUDENTS WHO HAVE TAKEN ANY OF THE FOLLOWING COURSES--OR EQUIVALENT--ED. AD. 430, 440, 461, 462, 464, 465, 466.
1 UNIT

03597	LECT-DISC	A	8	TUWTHF	15	COM W	MILLER
03601	LECT-DISC	B	9	TUWTHF	1	EDUC	

ED AD 461 ADMINISTRATION OF EDUCATIONAL PROGRAMS AND PERSONNEL.
PREREQUISITE--ED. AD. 460, AND 430 OR 440.
1 UNIT

03619	LECT-DISC	11-3	TU TH	8	COM W	SERGIOVANNI MCCLEARY

ED AD 462 FINANCIAL AND OPERATING STRUCTURES OF PUBLIC EDUCATION.
PREREQUISITE--ED. AD. 460, 461, 430 OR 440.
1 UNIT

03627	LECT-DISC	11-3	TU TH	11	COM W	RAUBINGER

ED AD 463 THE ROLE OF ADMINISTRATIVE LEADERSHIP.
PREREQUISITE--ED. AD. 460-462, 430 OR 440.
1 UNIT

03635	LECT-DISC	11-3	W F	8	COM W	MILLER, CARVER

ED AD 464 FIELD PROBLEMS IN EDUCATIONAL ADMINISTRATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS
*FOR STUDENTS IN SPECIAL EDUCATION ONLY.
SECTIONS A AND B MEET SECOND FOUR WEEKS ONLY.
SECTION C MEETS JUNE 26-JULY 21. OPEN ONLY TO STUDENTS IN JUNIOR COLLEGE LEADERSHOP WORKSHOP.

03660	LECT-DISC	A	8-11	TUWTHF	134	ARMORY	SPRINGER
03678	LECT-DISC	B	8-11	TUWTHF	385	EDUC	ROWE
03643	LECT-DISC	C	9-11	MTUWTHF	ARR		ANDERSON
		C	1-3	MTUWTHF	ARR		
03651	LECT-DISC	*H	ARR				HENDERSON

ED AD 465 PERSONNEL ADMINISTRATION.
PREREQUISITE--ED. AD. 460, 430 OR 440, AND 461.
1 UNIT

03686	LECT-DISC	8	TUWTHF	136	ARMORY	SERGIOVANNI

ED AD 466 PUBLIC SCHOOL FINANCE.
PREREQUISITE--ED. AD. 460 AND 430 OR 440 AND 462.
1 UNIT

03694	LECT-DISC	9	TUWTHF	389	EDUC	MCLURE

ED AD 468 SCHOOL-COMMUNITY RELATIONS.
1 UNIT

03708	LECT-DISC	11	TUWTHF	162	EDUC	SUMPTION

ED AD 469 LEGAL BASIS OF SCHOOL ADMINISTRATION.
1 UNIT

03716	LECT-DISC	10	TUWTHF	96	COM W	SUMPTION

ED AD 470 PRINCIPLES AND RESOURCES FOR SCHOOL PLANT PLANNING.
PREREQUISITE--ED. AD. 460.
1 UNIT

03724	LECT-DISC	8	TUWTHF	11	COM W	

ED AD 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

03732	CONF	ARR				STAFF

ED AD 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

03741	CONF	ARR				STAFF

ED AD 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS
03759 CONF ARR STAFF

EDUCATIONAL PRACTICE

DEPARTMENT OFFICE 236 EDUC

APPLICATION FOR ADMISSION TO EDUCATIONAL PRACTICE--ADMISSION TO STUDENT TEACHING IS LIMITED TO THOSE STUDENTS WHO HAVE BEEN ADMITTED TO ADVANCED STANDING IN A TEACHER EDUCATION CURRICULUM. STUDENTS MUST FILE APPLICATION FOR ADMISSION TO EDUCATION PRACTICE DURING THE MONTH OF APRIL PRIOR TO THE SUMMER SESSION IN WHICH THEY PLAN TO ENROLL FOR THE COURSE. APPLICATION FORMS MAY BE OBTAINED FROM THE DIRECTOR OF STUDENT TEACHING. CANDIDATES FOR UNIVERSITY OF ILLINOIS TEACHER-EDUCATION DEGREES MUST COMPLETE EDUCATIONAL PRACTICE--STUDENT TEACHING--AT THE UNIVERSITY OF ILLINOIS.

ELEMENTARY EDUCATION DEGREE CANDIDATES ENROLL IN ED. PR. 232, SECTION A.

COURSES FOR ADVANCED UNDERGRADUATES

ED PR 232 EDUCATIONAL PRACTICE IN ELEMENTARY EDUCATION.
PREREQUISITE--EL. ED. 233 AND 237 AND SENIOR STANDING.
2 TO 5 HOURS
*SECTION A IS FOR STUDENTS IN GENERAL ELEMENTARY CURRICULUM.
5 HOURS
03767 PRACT *A ARR STAFF

EDUCATIONAL PSYCHOLOGY

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR ADVANCED UNDERGRADUATES

EDPSY 211 EDUCATIONAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100.
3 HOURS

03775	LECT-DISC	1	TUWTHF	162	EDUC
	LAB	3-5	TU	162	EDUC

EDPSY 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS
03783 CONF ARR

EDPSY 291 THESIS.
PREREQUISITE--SENIOR STANDING
2 HOURS
03791 CONF ARR

EDPSY 292 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS
03805 CONF ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

EDPSY 311 PSYCHOLOGY OF LEARNING FOR TEACHERS.
PREREQUISITE--PRACTICE TEACHING OR TEACHING EXPERIENCE, AND ED. PSY. 211.
2 HOURS OR 1/2 UNIT
*MEETS FIRST FOUR WEEKS ONLY.

03813	LECT-DISC	A1	8	TUWTHF	2	EDUC		KNAPP
03821	LECT-DISC	A2	8	TUWTHF	428	ARMORY		THOMPSON
03830	LECT-DISC	B1	9	TUWTHF	205	G H		WEST
03848	LECT-DISC	B2	9	TUWTHF	221	G H		
03856	LECT-DISC	C1	10	TUWTHF	205	G H		KNAPP
03864	LECT-DISC	C2	10	TUWTHF	221	G H		
03872	LECT-DISC	D1	11	TUWTHF	205	G H		
03881	LECT-DISC	D2	11	TUWTHF	221	G H		
03899	LECT-DISC	E1	1-3	W F	2	EDUC		JONES
03902	LECT-DISC	*E2	1-3	TUWTHF	192	EDUC		MUUS

EDPSY 312 MENTAL HYGIENE AND THE SCHOOL.
PREREQUISITE--PRACTICE TEACHING OR TEACHING EXPERIENCE, AND ED. PSY. 211.
2 HOURS OR 1/2 UNIT
*MEETS SECOND FOUR WEEKS ONLY.

03911	LECT-DISC	A1	8	TUWTHF	429	ARMORY		
03929	LECT-DISC	A2	8	TUWTHF	430	ARMORY		
03937	LECT-DISC	B1	9	TUWTHF	136	ARMORY		BECKER
03945	LECT-DISC	C1	10	TUWTHF	2	EDUC		COSTIN
03953	LECT-DISC	D1	11	TUWTHF	2	EDUC		BECKER
03961	LECT-DISC	D2	11	TUWTHF	113	D K H		
03970	LECT-DISC	E1	1-3	TU TH	2	EDUC		DREIKURS
03988	LECT-DISC	*E2	1-3	TUWTHF	192	EDUC		

EDPSY 326 INTRODUCTION TO VOCATIONAL REHABILITATION COUNSELING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT

03996	LECT-DISC		ARR					MOSES

EDPSY 343 INDIVIDUAL INTELLIGENCE TESTING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY AND SP. ED. 324, OR ED. PSY. 392 OR PSYCH. 290, OR EQUIVALENT.
3 HOURS OR 1 UNIT

04002	LECT-DISC		8-10	TUWTHF	125	E P G B		NEWLAND

EDPSY 390 ELEMENTS OF EDUCATIONAL STATISTICS.
3 HOURS OR 1 UNIT

04011	LECT-DISC	A1	8-10	TUWTHF	332	ARMORY		
04029	LECT-DISC	A2	8-10	TUWTHF	242	EDUC		
04037	LECT-DISC	B1	10-12	TUWTHF	223	G H		
04045	LECT-DISC	E	1-3	TUWTHF	223	G H		WARBURTON

EDPSY 391 CONSTRUCTION AND USE OF TESTS IN TEACHING.
PREREQUISITE--ED. PSY. 211 OR EL. ED. 236.
4 HOURS OR 1 UNIT

04053	LECT-DISC		9	TUWTHF	223	G H		

EDPSY 392 INTRODUCTION TO THE PRINCIPLES OF MEASUREMENT.
PREREQUISITE--ED. PSY. 211 OR EL. ED. 236.
4 HOURS OR 1 UNIT

04061	LECT-DISC	A	8	TUWTHF	329	ARMORY		
04070	LECT-DISC	D	11	TUWTHF	40	COM W		
04088	LECT-DISC	E	1	TUWTHF	332	ARMORY		

COURSES FOR GRADUATES

EDPSY 411 PSYCHOLOGY OF ADOLESCENCE FOR TEACHERS.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

04096	LECT-DISC	A	8	TUWTHF	431	ARMORY		
04100	LECT-DISC	C	10	TUWTHF	162	EDUC		BLAIR

EDPSY 412 ADVANCED CHILD DEVELOPMENT FOR STUDENTS OF EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

04118	LECT-DISC		12	TUWTHF	192	EDUC	COSTIN

EDPSY 413 SOCIAL PSYCHOLOGY AND THE PROBLEMS OF EDUCATION.
PREREQUISITE--ED. PSY. 311, 312 AND 390.
1 UNIT
*PRIMARILY FOR STUDENTS IN SCHOOL ADMINISTRATION.

04134	LECT-DISC	*A	8	TUWTHF	1	EDUC	SIMPSON
04126	LECT-DISC	E	1	TUWTHF	217	G H	

EDPSY 414 THE PSYCHOLOGY OF COLLEGE TEACHING.
PREREQUISITE--A COURSE IN PSYCHOLOGY, CONSENT OF INSTRUCTOR.
1 UNIT

04142	LECT-DISC		1	TUWTHF	1	EDUC	

EDPSY 415 PSYCHOLOGICAL THEORIES APPLIED TO EDUCATION.
PREREQUISITE--ED. PSY. 311 AND 312, 411 OR 412, CANDIDACY
FOR ED. D. OR PH. D. IN EDUCATION.
1 UNIT

04151	LECT-DISC	A	1-3	TU TH	382	EDUC	BLAIR
04169	LECT-DISC	B	1-3	TU TH	94	COM W	WARBURTON

EDPSY 422 BASIC PRINCIPLES OF COUNSELING.
PREREQUISITE--ED. PSY. 311 AND 312.
1 UNIT

04177	LECT-DISC	A	8	TUWTHF	331	ARMORY	DELANEY
04185	LECT-DISC	B	9	TUWTHF	331	ARMORY	DAVIS
04193	LECT-DISC	D	11	TUWTHF	115	D K H	DELANEY
04207	LECT-DISC	E	1	TUWTHF	330	ARMORY	

EDPSY 423 THE USE OF TESTS IN GUIDANCE.
PREREQUISITE--ED. PSY. 392.
1 UNIT

04215	LECT-DISC	A	8	TUWTHF	330	ARMORY	
04223	LECT-DISC	E	1	TUWTHF	389	EDUC	

EDPSY 424 SUPERVISED PRACTICE IN COUNSELING.
PREREQUISITE--MASTERS DEGREE IN GUIDANCE AND
CONSENT OF FACULTY COMMITTEE.
2 UNITS

04231	CONF	A	ARR				BROPHY
04240	CONF	B	ARR				KACZKOWSKI

EDPSY 425 PRINCIPLES OF GUIDANCE.
*CREDIT IS NOT GIVEN IN BOTH ED. PSY. 325 AND 425.
*1 UNIT

04258	LECT-DISC	C	10	TUWTHF	330	ARMORY	ZACCARIA
04266	LECT-DISC	D	11	TUWTHF	134	ARMORY	
04274	LECT-DISC	E	1	TUWTHF	40	COM W	MOSES

EDPSY 426 DIAGNOSTIC AND REMEDIAL PROGRAMS OF THE SCHOOL.
PREREQUISITE--A BASIC COURSE IN THE TEACHING OF READING AND
CONSENT OF INSTRUCTOR.
1 UNIT
*OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.

04304	LECT-DISC	*A	8-10	W F	10	EDUC	RAY
04312	LECT-DISC	*B	8-10	TU TH	10	EDUC	RAY
04282	LECT-DISC	C	10	TUWTHF	10	EDUC	POWELL
04291	LECT-DISC	D	11	TUWTHF	10	EDUC	BENNETT

EDPSY 427 PRINCIPLES AND TECHNIQUES OF GROUP GUIDANCE.
PREREQUISITE--ED. PSY. 311, 312, 422, 423, AND EITHER 325 OR 425,
OR CONSENT OF INSTRUCTOR.
1 UNIT

04321	LECT-DISC	A	8	TUWTHF	8	COM W	MASUCCI
04339	LECT-DISC	B	9	TUWTHF	94	COM W	DAVIS

EDPSY 428 THE ANALYSIS AND USE OF OCCUPATIONAL INFORMATION IN GUIDANCE
PROGRAMS.
PREREQUISITE--ED. PSY. 325 OR 425, OR CONSENT OF INSTRUCTOR.
1 UNIT

04347	LECT-DISC		2	TUWTHF	205	G H	ZACCARIA

```
EDPSY 429     FIELD INSTRUCTION IN COUNSELING.
         PREREQUISITE--ED. PSY. 422 AND 424--WITH CONSENT OF INSTRUCTOR
         ED. PSY. 424 MAY BE TAKEN CONCURRENTLY.
         1 OR 2 UNITS
       04355      PRACT            ARR                                        PATTERSON


EDPSY 447     SEMINAR IN REHABILITATION COUNSELING.
         PREREQUISITE--ED. PSY. 326 AND 422.
         *MAY BE REPEATED FOR A MAXIMUM OF ONE UNIT.
         *1/2 UNIT
       04363      LECT-DISC        ARR


EDPSY 449     INDEPENDENT STUDY.
         *MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
         *1/2 OR 1 UNIT
       04371      CONF             ARR                                        STAFF


EDPSY 490     SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
         OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION
         FOR THE DEGREES OF PH.D. OR ED.D.
         1 TO 2 UNITS
         *OPEN ONLY TO STUDENTS IN ACADEMIC YEAR INSTITUTE.
       04380      CONF       A       10-12     TU TH        6  COM W          DREIKURS
       04398      CONF      *B       11        TUWTHF     102  E P G B        OHLSEN


EDPSY 491     FIELD STUDY AND THESIS SEMINAR.
         LIMITED TO ED.D. CANDIDATES.
         1 TO 2 UNITS
       04401      LECT-DISC        ARR


EDPSY 496     STATISTICAL METHODS IN EDUCATION.
         PREREQUISITE--ED. PSY. 390.
         1 UNIT
       04410      LECT-DISC  C       10-12     TUWTHF     242  EDUC           TATSUOKA
       04428      LECT-DISC  E        1-3      TUWTHF     166  COM W          MARLIN


EDPSY 499     THESIS RESEARCH.
         0 TO 2 1/2 UNITS
       04436      CONF             ARR                                        STAFF
```

ELECTRICAL ENGINEERING

```
          DEPARTMENT OFFICE                        155 E E B
```

COURSES FOR ADVANCED UNDERGRADUATES

```
E E   220     BASIC ELECTRICAL ENGINEERING.
         PREREQUISITE--PHYSICS 106 AND 107, AND MATH 143.
         3 HOURS
       04444      DISC       B        9        MTUWTHF    136  E E B
                             B        1         TU        136  E E B


E E   229     INTRODUCTION TO ELECTROMAGNETIC FIELDS.
         PREREQUISITE--PHYCS. 107, T.A.M. 154, MATH. 345, CREDIT OR
         REGISTRATION IN E.E. 250.
         3 HOURS
       04452      DISC       D       11        MTUWTHF    141  E E B
                             D        1            TH     141  E E B


E E   230     APPLICATION AND CONTROL OF MOTORS AND EQUIPMENT.
         PREREQUISITE--E E 220.
         2 HOURS
       04461      DISC       A        8        MTUWTH     136  E E B


E E   231     POWER EQUIPMENT LABORATORY.
         PREREQUISITE--CREDIT OR REGISTRATION IN E E 230.
         1 HOUR
       04479      LAB        P        2-5      M  W        50E E E B
```

E E 234 ELECTRICAL INSTRUMENTS AND MEASUREMENTS.
PREREQUISITE--E E 220.
2 HOURS

04487	DISC	C	10-12	TU TH	136	E E B

E E 235 ELECTRICAL MEASUREMENT LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 234.
1 HOUR

04495	LAB	R	2-5	TU TH	137	E E B

E E 250 LINEAR NETWORK THEORY I.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN E. E. 251, MATH. 195 AND 345.
5 HOURS

04509	DISC	A1	8-10	MTUWTHF	59	E E B
04517	DISC	A2	8-10	MTUWTHF	57	E E B

E E 251 ELECTRICAL ENGINEERING LABORATORY 1.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 250.
1 HOUR

04525	LAB	P	2-5	M W	50J	E E B
04533	LAB	R	2-5	TU TH	50J	E E B

E E 272 ELECTRICAL ENGINEERING PROBLEMS.
PREREQUISITE--APPROVED WRITTEN APPLICATION TO DEPARTMENT.
1 TO 4 HOURS

04541	CONF	K	ARR			

E E 288 ECONOMIC ASPECTS OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING IN ENGINEERING OR CONSENT OF INSTRUCTOR.
3 HOURS

04550	DISC	B	9	MTUWTHF	170	E E B
		B	1	TU	170	E E B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

E E 322 LINEAR NETWORK THEORY, 11.
PREREQUISITE--E.E. 250, 251, MATH. 195, 345.
4 HOURS, OR 0 TO 1 UNIT
*NSF SECTION FOR NSF STUDENTS ONLY.

04568	DISC	A	8-10	MTUWTH	168	E E B
04576	DISC	*NSF	8-10	MTUWTHF	234	E E B

E E 323 CIRCUIT LABORATORY.
PREREQUISITE--E. E. 251 AND 322, CREDIT OR REGISTRATION IN E. E. 350.
1 HOUR, OR 0 OR 1/4 UNIT

04584	LAB	P	2-5	M W	132	E E B
04592	LAB	R	2-5	TU TH	132	E E B

E E 330 MAGNETIC CIRCUITS AND TRANSFORMERS.
PREREQUISITE--E.E. 229, 250, 251, CREDIT OR REGISTRATION IN E.E. 331
3 HOURS, OR 0 OR 3/4 UNIT

04606	DISC	A	8	MTUWTHF	269	E E B
		A	1	M	269	E E B

E E 331 MAGNETIC CIRCUITS AND TRANSFORMER LABORATORY.
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 330.
1 HOUR, OR 0 OR 1/4 UNIT

04614	LAB	P	2-5	M W	50K	E E B

E E 340 ELECTRONICS.
PREREQUISITE--E. E. 250 AND 251.
3 HOURS, OR 0 OR 3/4 UNIT

04622	DISC	C	10	MTUWTHF	168	E E B
		C	1	W	168	E E B

E E 341 ELECTRONICS EXPERIMENTATION.
PREREQUISITE--E. E. 251, CREDIT OR REGISTRATION IN E. E. 340.
1 HOUR, OR 0 OR 1/4 UNIT

04631	LAB	P	2-5	M W	235	E E B
04649	LAB	R	2-5	TU TH	235	E E B

E E 342 ADVANCED ELECTRONICS.
PREREQUISITE--E. E. 322, 340 AND 341.
3 HOURS, OR 0 OR 3/4 UNIT

04657	DISC	D	11	MTUWTHF	269	E E B
		D	1	TH	269	E E B

E E 343 ELECTRONICS LABORATORY
PREREQUISITE--CREDIT OR REGISTRATION IN E. E. 342.
1 HOUR, OR 0 OR 1/4 UNIT

04665	LAB	P	2-5	M W	238	E E B
04673	LAB	R	2-5	TU TH	238	E E B

E E 350 LINES, FIELDS, AND WAVES.
PREREQUISITE--E. E. 229, MATH. 195, CREDIT OR REGISTRATION IN E. E. 323.
3 HOURS OR 3/4 UNIT

04681	DISC	C	10	MTUWTHF	141	E E B
		C	1	W	141	E E B

E E 352 ELECTROMAGNETIC FIELDS.
PREREQUISITE--E. E. 350, 323, CONCURRENT REGISTRATION IN E. E. 356 IS RECOMMENDED.
3 HOURS OR 3/4 UNIT

04690	DISC	C1	10	MTUWTHF	269	E E B
		C1	1	W	269	E E B
04703	DISC	C2	10	MTUWTHF	59	E E B
		C2	1	W	59	E E B

E E 356 MICRO WAVE TECHNIQUES.
PREREQUISITE--CREDIT OR REGISTRATION IN E.E. 352 OR 355.
1 HOUR, OR 0 OR 1/4 UNIT

04711	LAB	R	2-5	TU TH	251	E E B

E E 381 PULSE TECHNIQUES.
PREREQUISITE--E. E. 322, 340, AND 341, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH E. E. 347 AND E. E. 381.
*4 HOURS, OR 0 OR 1 UNIT

04720	DISC	C	10	MTUWTHF	170	E E B
		C	1	W	170	E E B
	LAB	C	2-5	M W	234	E E B

E E 382 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
4 HOURS OR 1 UNIT

04738	DISC	B	9	MTUWTHF	269	E E B
		B	1	TU	269	E E B
	LAB	B	2-5	TU TH	241	E E B

E E 383 TRANSISTOR CIRCUITS.
PREREQUISITE--E. E. 342 AND 343, CREDIT OR REGISTRATION IN MET. E. 384, OR CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT

04746	DISC	B	9	MTUWTHF	269	E E B
		B	1	TU	269	E E B

E E 388 ELECTRONIC ANALOG COMPUTERS.
PREREQUISITE--E.E. 340, 341, MATH. 345 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 0 OR 1 UNIT

04754	DISC	C	10	MTUWTHF	57	E E B
		C	1	W	57	E E B
04762	LAB	P	1-3	TU TH	263	E E B
04771	LAB	R	3-5	TU TH	263	E E B

E E 389 COMMUNICATION DESIGN.
PREREQUISITE--E.E. 342 AND E.E. 350.
3 HOURS, OR 0 OR 3/4 UNIT

04789	DISC	A	8	MTUWTHF	141	E E B
		A	1	M	141	E E B

COURSES FOR GRADUATES

E E 415 CONTROL SYSTEM THEORY AND DESIGN.
PREREQUISITE--E.E. 386 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1 UNIT

04797	DISC	C	10	MTUWTHF	335	E E B
		C	1	W	335	E E B

E E 416 ANALYSIS OF LINEAR NETWORKS AND SYSTEMS.
PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 346 OR 348, E.E. 322 OR EQUIVALENT.
1 UNIT

04801	DISC	B	9	MTUWTHF	335	E E B
		B	1	TU	335	E E B

E E 420 ELECTROMAGNETIC WAVES AND RADIATING SYSTEMS.
PREREQUISITE--E.E. 352.
1 UNIT

04819	DISC	A	8	MTUWTHF	335	E E B
		A	1	M	335	E E B

E E 498 INDIVIDUAL STUDY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

04827	CONF	K	ARR

E E 499 THESIS RESEARCH.
0 TO 2 UNITS

04835	CONF	K	ARR

ELEMENTARY EDUCATION

DEPARTMENT OFFICE 306 EDUC

COURSES FOR ADVANCED UNDERGRADUATES

EL ED 230 PRINCIPLES, PROBLEMS AND ISSUES IN ELEMENTARY EDUCATION.
PREREQUISITE--MUST BE TAKEN CONCURRENTLY WITH ED. PR. 232.
3 HOURS

04843	LECT-DISC	1-230	TUWTHF	385	EDUC

EL ED 233 CLASSROOM PROGRAMS IN CHILDHOOD EDUCATION.
PREREQUISITE--JUNIOR STANDING, EL. ED. 236.
2 HOURS

04851	LECT-DISC	9	TUWTHF	6	COM W

EL ED 235 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 101, JUNIOR STANDING.
3 HOURS.

04860	LECT-DISC	8	TUWTHF	205	G H
	LAB	ARR			

EL ED 236 CHILD DEVELOPMENT FOR ELEMENTARY TEACHERS.
PREREQUISITE--PSYCH. 100, EL. ED. 101.
3 HOURS

04878	LECT-DISC	11	TUWTHF	91	COM W
	LAB	ARR			

EL ED 237 THEORY AND PROCESS IN ELEMENTARY SCHOOL TEACHING.
PREREQUISITE--EL. ED. 236.
5 HOURS

04886	LECT-DISC	1-230	W F	11	COM W	
		1-230	TU TH	30	COM W	
	LAB	9-11	TUWTHF	11	COM W	

EL ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

04894	CONF	ARR				STAFF

EL ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

04908	CONF	ARR				STAFF

EL ED 292 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

04916	CONF	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

EL ED 333 THE TEACHING OF LANGUAGE ARTS IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 236 AND 237.
3 HOURS, OR 1/2 TO 1 UNIT

04924	LECT-DISC	C	10	TUWTHF	15	COM W	SALZER
04932	LECT-DISC	D	11	TUWTHF	223	D K H	MOORE

EL ED 335 SCIENCE IN THE ELEMENTARY SCHOOL.
PREREQUISITE--EL. ED. 233 AND 237, OR EQUIVALENT, TWO YEARS OF COLLEGE SCIENCE.
3 HOURS OR 1/2 UNIT

04941	LECT-DISC		10	TUWTHF	4G	EDUC	WELLER
	LAB		ARR				

EL ED 336 PRIMARY READING.
PREREQUISITE--JUNIOR STANDING AND REGISTRATION IN A TEACHER EDUCATION CURRICULUM.
3 HOURS, OR 1/2 OR 1 UNIT

04959	LECT-DISC	A	8	TUWTHF	389	EDUC	POWELL
04967	LECT-DISC	B	12	TUWTHF	162	EDUC	BENNETT

EL ED 337 ART EDUCATION IN THE ELEMENTARY SCHOOL.
PREREQUISITE--JUNIOR STANDING.
3 HOURS OR 1/2 UNIT

04975	LECT-DISC	A	8	TUWTHF	106	F A B	LANSING
04983	LECT-DISC	D	11	TUWTHF	106	F A B	SMITH

EL ED 354 AUDIO-VISUAL COMMUNICATION.
SAME AS SE. ED. 354
PREREQUISITE--SENIOR OR GRADUATE STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

04991	LECT-DISC		2-4	TUWTHF	1	EDUC	LORENZ

COURSES FOR GRADUATES

EL ED 431 ELEMENTARY SCHOOL CLASSROOM PROGRAMS.
1 UNIT
•SECTION C MEETS LAST FOUR WEEKS ONLY.

05008	LECT-DISC	A	8	TUWTHF	221	G H	SALZER
05016	LECT-DISC	B	9	TUWTHF	192	EDUC	BARNES
05032	LECT-DISC	•C	10-12	TUWTHF	123	D K H	
05024	LECT-DISC	D	11	TUWTHF	206	D K H	HOOK

EL ED 433 CURRICULUM PROBLEMS AND TRENDS IN SPECIAL FIELDS OF ELEMENTARY EDUCATION.

PREREQUISITE--FOR ALL SECTIONS, EL. ED. 431 OR 434 OR CONSENT OF INSTRUCTOR--LANGUAGE ARTS SECTIONS, EL. ED. 333 AND 336 OR A COURSE IN THE TEACHING OF READING OR LANGUAGE ARTS, OR CONSENT OF INSTRUCTOR--CREATIVE ARTS SECTION, EL. ED. 337 OR CONSENT OF INSTRUCTOR--SCIENCE SECTION, EL. ED. 335 OR A METHODS COURSE IN TEACHING SCIENCE IN THE ELEMENTARY SCHOOL AND TWO YEARS OF COLLEGE SCIENCE, OR CONSENT OF INSTRUCTOR--READING SECTION, EL. ED. 336 OR COURSE IN TEACHING OF READING, OR CONSENT OF INSTRUCTOR--EARLY CHILDHOOD SECTION, EL. ED. 434, OR CONSENT OF INSTRUCTOR.

1 UNIT

*SECTION A IS FOR LANGUAGE ARTS
*SECTIONS B AND B1 ARE FOR SOCIAL STUDIES
*SECTION C IS FOR ARITHMETIC
SECTION D IS FOR SCIENCE
*SECTION E IS FOR CREATIVE ARTS
*SECTION F IS FOR READING
*SECTION G IS FOR EARLY CHILDHOOD

05041	LECT-DISC	*A	9	TUWTHF	20	COM W	MOORE
05059	LECT-DISC	*B	8	TUWTHF	20	COM W	MCGILL
05067	LECT-DISC	*B1	10	TUWTHF	331	ARMORY	MCGILL
05075	LECT-DISC	*C	9	TUWTHF	43	G H	LERCH
05083	LECT-DISC	*D	8	TUWTHF	432	ARMORY	WELLER
05091	LECT-DISC	*E	10	TUWTHF	133	F A B	LANSING
05105	LECT-DISC	F	8	TUWTHF	382	EDUC	DURKIN

EL ED 434 PROGRAMS IN EARLY CHILDHOOD EDUCATION.

1 UNIT

05113	LECT-DISC	11	TUWTHF	125	D K H	LANGSTON

EL ED 437 METHODS OF CHILD STUDY.

PREREQUISITE--ED. PSY. 312 OR CONSENT OF INSTRUCTOR.

1 UNIT

05121	LECT-DISC	9	TUWTHF	15	COM W	LANGSTON

EL ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.

1 UNIT

05130	LECT-DISC	A	8	TUWTHF	192	EDUC	SHORES
05148	LECT-DISC	B	9	TUWTHF	30	COM W	HOOK
05156	LECT-DISC	C	10	TUWTHF	43	G H	SHORES

EL ED 449 INDEPENDENT STUDY.

*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.

*1/2 OR 1 UNIT

05164	CONF	ARR					GRADUATE STAFF

EL ED 455 THEORIES OF ART EDUCATION.

PREREQUISITE--EL. ED. 337 OR SE ED 456, OR CONSENT OF INSTRUCTOR.

1 UNIT

05172	LECT-DISC	9	TUWTHF	133	F A B	SMITH

EL ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.

1 TO 2 UNITS

*SECTION D IS FOR ARITHMETIC AND MEETS FIRST FOUR WEEKS. THIS WORKSHOP FOCUSES ON MODERN DEVELOPMENTS IN THE ELEMENTARY SCHOOL ARITHMETIC PROGRAM AND THE IMPROVEMENT OF TEACHING OF ARITHMETIC. BASIC MATHEMATICAL UNDERSTANDINGS AND CONCEPTS FOR IMPROVED TEACHING METHODS AND MATERIALS WILL BE STRESSED.

*SECTION G IS RESTRICTED TO STUDENTS ENROLLED IN THE NDEA INSTITUTE FOR ADVANCED STUDY OF DISADVANTAGED YOUTH. MEETS FROM JUNE 19 THROUGH AUGUST 11.

*SECTION R IS FOR RESEARCH AND DESIGN IN CURRICULUM DEVELOPMENT. THIS WORKSHOP IS DESIGNED ESPECIALLY FOR ADVANCED GRADUATE STUDENTS IN EDUCATION INCLUDING CURRICULUM SPECIALISTS, SUPERVISORS, AND PRINCIPALS.

05181	LECT-DISC	*D	9-1130	TUWTHF	305	G H	PHILLIPS
		*D	130-3	TUWTHF	305	G H	
05199	LECT-DISC	*G	8-12	MTUWTHF	24	COM W	MANOLAKES,
		*G	1-5	MTUWTHF	24	COM W	SPODEK,
		*G	1-5	MTUWTHF	20	COM W	AND DODL
		*G	1-5	MTUWTHF	96	COM W	
05202	LECT-DISC	*R	11	TUWTHF	25	EDUC	BARNES LERCH

EL ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS
05211 CONF ARR GRADUATE STAFF

EL ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS
05229 CONF ARR GRADUATE STAFF

EL ED 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS
05237 CONF ARR GRADUATE STAFF

ENGINEERING

DEPARTMENT OFFICE 103 E H

COURSES FOR UNDERGRADUATES

ENG 101 COOPERATIVE ENGINEERING EDUCATION SEMINAR.
PREREQUISITE--COOPERATIVE STUDENT IN ANY ENGINEERING CURRICULUM.
0 HOURS
05245 LECT-DISC ARR OPPERMAN

ENG 102 COOPERATIVE ENGINEERING EDUCATION PRACTICE.
PREREQUISITE--COOPERATIVE STUDENT IN ANY ENGINEERING CURRICULUM.
0 HOURS
05253 LECT-DISC ARR OPPERMAN

ENGLISH LITERATURE AND AMERICAN LITERATURE

DEPARTMENT OFFICE 100 E B

MAJOR--A COURSE IN SHAKESPEARE AND TWENTY ADDITIONAL HOURS IN ENGLISH, EXCLUDING ENGLISH 101, 102, 103, 105, 106, 113, 114, 121, 122, 123, 304, AND RHETORIC 101, 102, 107, 108, 200, 251, 271, 272. OF THESE TWENTY ADDITIONAL HOURS, SEVENTEEN MUST BE TAKEN IN ENGLISH OR AMERICAN LITERATURE, INCLUDING THREE HOURS FROM EACH OF THE FOLLOWING GROUPS--1.-AMERICAN LITERATURE-ENGLISH 255, 256-A STUDENT WHO HAS CREDIT FOR BOTH ENGLISH 113 AND 114 MAY OFFER ENGLISH 272, 273, 287, 288, 316, 352, 353, 354, 359, 375, 376, 377, OR 380. 2.-ENGLISH LITERATURE PRIOR TO 1616, ENGLISH 221, 235, 311, 325, 326, OR 336. 3.-ENGLISH LITERATURE FROM 1616 TO 1800, ENGLISH 245, 342, 345, 346, 348, OR 349. 4.-ENGLISH LITERATURE FROM 1800 TO THE PRESENT, ENGLISH 246, 263, 264, 281, 282, 283, OR 284.

FOR UNDERGRADUATE STUDENTS WHO CONTEMPLATE TAKING ADVANCED WORK OR ARE MAJORING IN ENGLISH, THE FOLLOWING SEQUENCES OF COURSES ARE SUGGESTED. FRESHMAN YEAR, FIRST SEMESTER, ENGLISH 101 OR RHETORIC 107-SECOND SEMESTER, ENGLISH 102 OR 103 OR RHETORIC 108. SOPHOMORE YEAR, FIRST SEMESTER, ENGLISH 105 OR ENGLISH 121-SECOND SEMESTER ENGLISH 106 OR ENGLISH 122. ENGLISH 101 AND EITHER 102 OR 103, OR RHETORIC 107 AND 108 ARE THE NORMAL PREREQUISITE TO THE ENGLISH MAJOR. IF NECESSARY, ENGLISH 101, 102, OR 103 MAY BE TAKEN CONCURRENTLY WITH ADVANCED COURSES. IN EXCEPTIONAL CASES, ENGLISH 105 AND 106 OR ENGLISH 121 AND 122 MAY BE ACCEPTED AS ALTERNATIVE PREREQUISITES TO THE MAJOR.

MINORS--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, ANY FOREIGN LANGUAGE, HISTORY, HUMANITIES, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POL. SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC-NOT INCLUDING APPLIED MUSIC-COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. THE PROGRAM IN ASIAN STUDIES IS ACCEPTED AS A SOLE MINOR. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THEIR DEPARTMENTS EXCEPT FRENCH 103, 104, GERMAN 103, 104, LATIN 101, 102, 103, PORTUGUESE 103, 104, RUSSIAN 103, 104, AND SPANISH 103, 104. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED.
STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

ENGLISH MAJORS WHO INTEND TO TEACH IN SECONDARY SCHOOLS MUST SEE THE ADVISER ON SPECIAL CURRICULA.

DEPARTMENTAL HONORS PROGRAM AND DISTINCTION--
THE ENGLISH DEPARTMENT OFFERS FIVE SPECIAL COURSES, 197, 295, 296, 297, 298, WHICH CONSTITUTE THE HONORS PROGRAM. A FULL DESCRIPTION OF THIS PROGRAM MAY BE OBTAINED FROM THE DEPARTMENTAL OFFICES, THE DEPARTMENTAL DIRECTOR OF HONORS, OR FROM ANY MAJOR ADVISOR. A STUDENT MAJORING IN ENGLISH WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT OF 4.0 OR BETTER MAY EARN DISTINCTION ONLY BY SUCCESSFULLY COMPLETING ENGLISH 297, 298, AND ANY TWO OF THE OTHER THREE-197, 295, 296- HONORS SEMINARS IN ADDITION TO THE OTHER REMAINING REGULAR REQUIREMENTS FOR HIS MAJOR. A STUDENT ENROLLED IN THE TEACHER EDUCATION CURRICULUM MAY EARN DISTINCTION BY SUBSTITUTING ENGLISH 197 FOR ENGLISH 297 AND BY TAKING ENGLISH 298 DURING WHICHEVER SEMESTER OF HIS SENIOR YEAR HE IS ON CAMPUS THE FULL TIME.

THE LEVEL OF DISTINCTION-HIGHEST, HIGH, DISTINCTION-IS DETERMINED BY THE HONORS COMMITTEE, THE INSTRUCTORS IN THE HONORS SEMINARS, THE ENGLISH 298 TUTOR, AND SUCH OTHER FACULTY MEMBERS AS MAY BE ASKED TO READ THE HONORS ESSAY. TO RECEIVE HIGHEST DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE POINT AVERAGE OF 4.75 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR-TO RECEIVE HIGH DISTINCTION, HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.5. IF, IN THE OPINION OF THOSE DESIGNATED TO DETERMINE THESE MATTERS, A CANDIDATE FAILS TO EARN ANY KIND OF DISTINCTION, HE WILL STILL RECEIVE CREDIT FOR THE HONORS COURSES HE HAS TAKEN.

COURSES FOR UNDERGRADUATES

ENGL 101 INTRODUCTION TO POETRY.
3 HOURS

05261	LECT-DISC	A	8	MTUWTHF	149	ADMIN
		A	12	M	149	ADMIN

ENGL 102 INTRODUCTION TO THE DRAMA.
3 HOURS

05270	LECT-DISC	F	2	MTUWTHF	149	ADMIN
		F	3	M	149	ADMIN

ENGL 103 INTRODUCTION TO FICTION.
3 HOURS

05288	LECT-DISC	B	9	MTUWTHF	152	ADMIN
		B	12	TU	152	ADMIN
05296	LECT-DISC	C	10	MTUWTHF	140	ADMIN
		C	12	W	140	ADMIN
05300	LECT-DISC	E	1	MTUWTHF	140	ADMIN
		E	3	TU	140	ADMIN

ENGL 113 CLASSIC AMERICAN AUTHORS BEFORE THE CIVIL WAR.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 113 IN ADDITION TO ENGL. 255.
*3 HOURS

05318	LECT-DISC	C	10	MTUWTHF	152	ADMIN
		C	12	W	152	ADMIN

ENGL 114 CLASSIC AMERICAN AUTHORS AFTER THE CIVIL WAR TO THE PRESENT.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
*CREDIT IS NOT GIVEN FOR ENGL. 114 IN ADDITION TO ENGL. 256.
*3 HOURS

05326	LECT-DISC	A	8	MTUWTHF	142	ADMIN	
		A	12	M	142	ADMIN	
05334	LECT-DISC	D	11	MTUWTHF	140	ADMIN	
		D	12	TH	140	ADMIN	

ENGL 123 CHIEF MODERN ENGLISH WRITERS.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102, OR DESIGNATION AS EDMUND J. JAMES SCHOLAR.
3 HOURS

05342	LECT-DISC	B	9	MTUWTHF	119	E B	
		B	12	TU	119	E B	

ENGL 131 INTRODUCTION TO SHAKESPEARE.
PREREQUISITE--SOPHOMORE STANDING OR EXEMPTION FROM RHET. 102. OR DESIGNATION AS AN EDMUND J. JAMES SCHOLAR.
3 HOURS

05351	LECT-DISC	E	1	MTUWTHF	152	ADMIN	
		E	3	TU	152	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES

ENGL 245 ENGLISH LITERATURE FROM 1688 TO 1789.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

05369	LECT-DISC	A	8	MTUWTHF	140	ADMIN	TIBBETTS
		A	12	M	140	ADMIN	

ENGL 246 THE ENGLISH ROMANTIC POETS.
3 HOURS

05377	LECT-DISC	B	9	MTUWTHF	108	E B	MAJDIAK
		B	12	TU	108	E B	

ENGL 252 GREAT ENGLISH NOVELISTS OF THE NINETEENTH CENTURY.
3 HOURS

05385	LECT-DISC	F	2	MTUWTHF	152	ADMIN	KORAL
		F	3	M	152	ADMIN	

ENGL 255 SURVEY OF AMERICAN LITERATURE, I.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 113 AND 255.
*3 HOURS

05393	LECT-DISC	B	9	MTUWTHF	117	E B	HAMILTON
		B	12	TU	117	E B	

ENGL 256 SURVEY OF AMERICAN LITERATURE, II.
*CREDIT IS NOT GIVEN FOR BOTH ENGL. 114 AND 256.
*3 HOURS

05407	LECT-DISC	C	10	MTUWTHF	149	ADMIN	HASKELL
		C	12	W	149	ADMIN	

ENGL 257 SURVEY OF ENGLISH LITERATURE, I.
PREREQUISITE--SENIOR STANDING.
3 HOURS

05415	LECT-DISC	E	1	MTUWTHF	117	E B	HURT
		E	3	W	117	E B	

ENGL 258 SURVEY OF ENGLISH LITERATURE,II.
PREREQUISITE--SENIOR STANDING.
3 HOURS

05423	LECT-DISC	C	10	MTUWTHF	117	E B	MAJDIAK
		C	12	W	117	E B	

ENGL 283 ENGLISH LITERATURE IN THE TWENTIETH CENTURY, I.
3 HOURS

05431	LECT-DISC	F	2	MTUWTHF	140	ADMIN	ADELMAN
		F	3	M	140	ADMIN	

ENGL 284 ENGLISH LITERATURE IN THE TWENTIETH CENTURY, II.
3 HOURS

05440	LECT-DISC	D	11	MTUWTHF	152	ADMIN	LOFTUS
		D	12	TH	152	ADMIN	

ENGL 286 THE SHORT STORY, II.
PREREQUISITE--ONE COURSE IN ENGLISH OR AMERICAN LITERATURE.
3 HOURS

05458	LECT-DISC	D	11	MTUWTHF	137	ADMIN	CURLEY
		D	12	TH	137	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENGL 311 CHAUCER.
3 HOURS OR 3/4 UNIT

05466	LECT-DISC	D	11	MTUWTHF	149	ADMIN	STILLWELL
		D	12	TH	149	ADMIN	

ENGL 342 THE POETRY OF MILTON.
3 HOURS OR 3/4 UNIT

05474	LECT-DISC	E	1	MTUWTHF	149	ADMIN	KAUFMANN
		E	3	TU	149	ADMIN	

ENGL 348 SWIFT, POPE, AND FIELDING.
PREREQUISITE--A COURSE IN ENGLISH LITERATURE.
3 HOURS OR 3/4 UNIT

05482	LECT-DISC	C	10	MTUWTHF	142	ADMIN	SANDERS
		C	12	W	142	ADMIN	

ENGL 385 THEMES AND MOVEMENTS IN AMERICAN LITERATURE.
3 HOURS OR 3/4 UNIT

05491	LECT-DISC	B	9	MTUWTHF	149	ADMIN	STUBBS
		B	12	TU	149	ADMIN	

ENGL 392 SEMINAR ON THE PROBLEMS OF TEACHING ENGLISH IN SOUTH ASIA.
SAME AS LING. AND RHET. 392.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT

05504	LECT-DISC	B	9	MTUWTHFS	217	G H	ASTON

COURSES FOR GRADUATES

ENGL 413 STUDIES IN SHAKESPEARE.
1 UNIT

05512	LECT-DISC	C	10	MTUWTH	309	LIB	EVANS

ENGL 414 STUDIES IN ELIZABETHAN DRAMA.
PREREQUISITE--GRADUATE STANDING.
1 UNIT

05521	LECT-DISC	B	9	MTUWTH	309	LIB	EVANS

ENGL 417 STUDIES IN SEVENTEENTH CENTURY POETRY AND MILTON, 1600-1640.
1 UNIT

05539	LECT-DISC	G	3-5	M W	142	ADMIN	KAUFMAN

ENGL 432 STUDIES IN VICTORIAN LITERATURE II.
1 UNIT

05547	LECT-DISC	E	1-3	M W	142	ADMIN	SMALLEY

ENGL 433 MAJOR MOVEMENTS IN MODERN BRITISH POETRY AND DRAMA.
1 UNIT

05555	LECT-DISC	E	1-3	TU TH	142	ADMIN	BRANDABUR

ENGL 434 MAJOR MOVEMENTS IN MODERN BRITISH FICTION.
1 UNIT

05563	LECT-DISC	G	3-5	M W	137	ADMIN	WILSON

ENGL 438 STUDIES IN AMERICAN LITERATURE AFTER 1800.
PREREQUISITE--SURVEY COURSE IN AMERICAN LITERATURE OR CONSENT OF INSTRUCTOR.
1 UNIT
TOPIC--AMERICAN THOUGHT AND WRITING 1865 - 1910.

05571	LECT-DISC	B	9	MTUWTH	142	ADMIN	KINNAMON
05580	LECT-DISC	D	11	MTUWTH	142	ADMIN	ALTENBERND

ENGL 446 INTRODUCTION TO ADVANCED GRADUATE STUDY.
REQUIRED OF ALL CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGLISH.
1/4 UNIT

05598	LECT-DISC	F	10-12	F	309	LIB	WASSON

ENGL 479 PROBLEMS IN VICTORIAN LITERATURE.
PREREQUISITE--ENGL. 431 OR 432, OR CONSENT OF INSTRUCTOR
1 UNIT

05601	LECT-DISC	E	1-3	TU TH	137	ADMIN	SMALLEY

ENGL 480 THE ENGLISH NOVEL IN TRANSITION, 1890-1914.
1 UNIT

05610	LECT-DISC	G	3-5	TU TH	137	ADMIN	WILSON

ENGL 484 PROBLEMS IN TWENTIETH CENTURY ENGLISH LITERATURE.
PREREQUISITE--CONSENT OF INSTRUCTOR, OR A SURVEY OF ENGLISH LITERATURE.
1 UNIT
TOPIC--W. B. YEATS AND ROBERT GRAVES.

05628	LECT-DISC	E	1-3	M W	137	ADMIN	BRANDABUR

ENGL 491 RESEARCH IN SPECIAL TOPICS.
*THIS COURSE MAY BE REPEATED FOR A TOTAL OF TWO UNITS
*1 UNIT

05636	CONF	ARR	WASSON

ENGL 497 INDEPENDENT READING.
PREREQUISITE--CONSENT OF INSTRUCTOR OF REQUISITE 300 LEVEL COURSE.
*STUDENTS MAY ACCUMULATE 1/2 UNIT.
*1/4 UNIT

05644	CONF	ARR

ENGL 499 THESIS RESEARCH.
0 TO 2 UNITS
INSTRUCTORS-ALTENBERND, BARKER, CAMPBELL, DAVIDSON, EVANS, FLANAGAN, GETTMANN, HAIG, HOLADAY, HOOK, LYNEN, MCBURNEY, MILLIGAN, PAUL, ROGERS, SCOTT, SHATTUCK, SMALLEY, STILLINGER, STILLWELL, AND WILSON.

05652	CONF	ARR

ENTOMOLOGY

DEPARTMENT OFFICE 320 MOR HALL

MAJOR--TWENTY HOURS IN ENTOMOLOGY, EXCLUDING ENTOM. 101, 103, AND 131. ZOOL. 318 AND 321 MAY BE APPLIED FOR MAJOR CREDIT. AT LEAST FIVE HOURS MUST BE TAKEN FROM THE ADVANCED GROUP.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--AGRONOMY, BOTANY, CHEMISTRY, HORTICULTURE, MICROBIOLOGY, PHYSIOLOGY, AND ZOOLOGY.

AS A GENERAL POLICY, STUDENTS WHO CONTEMPLATE EVENTUAL CAREERS IN ENTOMOLOGY ARE URGED TO USE THE UNDERGRADUATE YEARS TO GAIN THOROUGH GROUNDING IN THE FUNDAMENTALS OF PHYSICAL AND BIOLOGICAL SCIENCE, IN MATHEMATICS AND THE OTHER LIBERAL ARTS, AND IN THE TECHNIQUES OF COMMUNICATION. THE DEPARTMENT IS GLAD TO ADVISE STUDENTS IN REGARD TO THE MOST EFFECTIVE SCHEDULE OF STUDY TO SUIT THEIR PARTICULAR NEEDS.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ENTOM 306 SPECIAL PROBLEMS.
PREREQUISITE--ANY OF THE FOLLOWING--ENTOM. 131, 301, 302, 317, 319, 322, OR ZOOL. 101 OR 321, SENIOR STANDING.
2 TO 5 HOURS, OR 1/4 OR 1 UNIT

05661	CONF		ARR					STAFF

ENTOM 312 ENTOMOLOGY FOR TEACHERS.
PREREQUISITE--ONE YEAR OF BIOLOGY, BOTANY, ZOOLOGY OR EQUIVALENT.
FIELD TRIPS.
3 HOURS OR 1/2 UNIT

05679	LAB-DISC		10-12	MTUW	F	309	H H	

COURSES FOR GRADUATES

ENTOM 499 THESIS--RESEARCH.
0 TO 2 UNITS
WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--

A--MORPHOLOGY AND EMBRYOLOGY OF INSECTS	LARSEN, MACLEOD, STERNBURG
B--APPLIED AND MEDICAL ENTOMOLOGY	HORSFALL, KEARNS
C--SYSTEMATIC ENTOMOLOGY	ROSS, SELANDER
D--BIOLOGY AND ECOLOGY OF INSECTS	GHENT, HORSFALL, JAYCOX
E--INSECT PHYSIOLOGY & TOXICOLOGY	FRAENKEL, FRIEDMAN, KEARNS, LARSEN STERNBURG, WALDBAUER WILLIS

05687	LAB		ARR					

FINANCE

DEPARTMENT OFFICE 311 D K H

REQUIREMENTS FOR L. A. S. STUDENTS
MAJOR--TWENTY HOURS IN FINANCE. A FINANCE MAJOR WHO CHOOSES ECONOMICS AS A MINOR MUST INCLUDE ALSO TWELVE HOURS IN A SECOND MINOR.

ECON. 108 OR ECON. 102 AND 103, ARE FUNDAMENTAL COURSES IN ECONOMICS AND ARE PREREQUISITES FOR COURSES IN FINANCE. STUDENTS WHO EXPECT TO DO ADVANCED WORK IN FINANCE SHOULD TAKE ECON. 108, OR ECON. 102 AND 103, IN THEIR SOPHOMORE YEAR. LIBERAL ARTS MAJORS IN FINANCE ARE ADVISED STRONGLY TO ELECT ACCY. 201 AND A COURSE IN STATISTICS.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, GEOLOGY, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY. THE CURRICULUM IN LATIN-AMERICAN STUDIES IS ACCEPTED AS A MINOR.

COURSES FOR UNDERGRADUATES

FIN 150 MONEY, CREDIT, AND BANKING.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS

05695	LECT-DISC	C	11	MTUWTHFS	28	COM W		BRYAN

COURSES FOR ADVANCED UNDERGRADUATES

FIN 254 BUSINESS FINANCE.
PREREQUISITE--ACCY. 105 OR 201, FIN. 150.
CREDIT OR REGISTRATION IN ECON. 172.
*CREDIT IS NOT GIVEN FOR BOTH FIN. 254 AND FIN. 257.
*3 HOURS

05709	LECT-DISC	A	8	MTUWTHFS	166	COM W		GENTRY
05717	LECT-DISC	D	10	MTUWTHFS	28	COM W		GRAY

FIN 258 THE MONEY MARKET AND AMERICAN FINANCIAL INSTITUTIONS.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS
05725 LECT-DISC B 9 MTUWTHFS 166 COM W GENTRY

FIN 260 ECONOMICS OF INSURANCE.
PREREQUISITE--ECON. 103 OR 108.
3 HOURS
05733 LECT-DISC D 11 MTUWTHFS 166 COM W MEHR

FIN 294 SENIOR RESEARCH.
PREREQUISITE--SENIOR STANDING.
2 TO 4 HOURS
05741 CONF ARR MEHR

COURSES FOR GRADUATES

FIN 425 THE MONEY MARKET AND FINANCIAL STABILIZATION.
PREREQUISITE--FIN. 250.
1 UNIT
05750 LECT-DISC A 8-10 M TH 28 COM W BRYAN

FIN 490 INDIVIDUAL STUDY AND RESEARCH.
1/2 TO 1 UNIT
05768 CONF ARR MEHR

FIN 499 THESIS RESEARCH.
0 TO 2 UNITS
05776 LECT-DISC QTH 4-6 TH 28 COM W MEHR

FOOD SCIENCE
INCLUDING DAIRY TECHNOLOGY

FOOD SCIENCE

DEPARTMENT OFFICE 213 M H

COURSES FOR GRADUATES

F S 481 ADVANCED STUDIES IN FOOD SCIENCE.
1/2 TO 2 UNITS
05784 CONF ARR STAFF

F S 499 THESIS RESEARCH.
0 TO 2 UNITS
05792 CONF ARR STAFF

DAIRY TECHNOLOGY

OFFICE 104 D M B

COURSES FOR GRADUATES

D T 491 ASSIGNED PROBLEMS IN DAIRY TECHNOLOGY.
PREREQUISITE--GRADUATE STANDING IN DAIRY TECHNOLOGY.
1/2 TO 2 UNITS
05806 CONF ARR STAFF

D T 499 THESIS RESEARCH.
0 TO 2 UNITS
05814 CONF ARR STAFF

FORESTRY

DEPARTMENT OFFICE 219 M H

COURSES FOR ADVANCED UNDERGRADUATES

THE FORESTRY COURSES FOR ADVANCED UNDERGRADUATES ARE DESIGNED PRIMARILY FOR STUDENTS WHO ARE CANDIDATES FOR THE PROFESSIONAL DEGREE OF BACHELOR OF SCIENCE IN FORESTRY IN EITHER THE FOREST PRODUCTION OR WOOD TECHNOLOGY AND UTILIZATION CURRICULUM. OTHER STUDENTS ARE ADMITTED TO MOST OF THESE COURSES, HOWEVER, IF THEY HAVE THE PREREQUISITES OR THE CONSENT OF THE INSTRUCTOR.

FOR 211 INTRODUCTION TO SILVICS AND SILVICULTURE--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
05822 CONF ARR BOGGESS AND LORENZ

FOR 221 FOREST MENSURATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
3 HOURS
05831 CONF ARR JOKELA

FOR 231 WOOD UTILIZATION--SUMMER CAMP.
PREREQUISITE--REGISTRATION IN SUMMER CAMP.
2 HOURS
05849 CONF ARR WALTERS

COURSES FOR GRADUATES

FOR 401 SPECIAL PROBLEMS.
*NOT MORE THAN ONE UNIT MAY BE OFFERED TOWARD AN M.S. DEGREE.
*1/2 OR 1 UNIT
05857 CONF ARR GRADUATE STAFF

FOR 499 THESIS RESEARCH.
1 TO 3 UNITS
05865 CONF ARR GRADUATE STAFF

FRENCH

DEPARTMENT OFFICE 244 L H

MAJOR--TWENTY HOURS IN FRENCH, EXCLUDING FRENCH 101, 102, 103, 104, 113, AND INCLUDING FR. 201, 202, 211, 212 AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, NOT LESS THAN FOUR OF THESE HOURS TO BE IN LITERATURE. STUDENTS ARE ALSO STRONGLY ADIVSED TO TAKE A YEARS WORK, TWO COURSES, IN EUROPEAN HISTORY AND A YEARS WORK, TWO COURSES, IN ENGLISH LITERATURE. COURSES PARTICULARLY SUITABLE FOR THIS PURPOSE ARE--HIST. 111-112, 309-310, 311-312, 313-314, 323-324. ENGL. 101, 102, 103, 105, 106, 121, 122, 123, 131, 231, 232, 245, 246, 251, 252, 253, 257, 258, 263, 264, 281, 282, 283, 284. HUMAN. 215, 216, 363, 364.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH SUBJECT IF TWO ARE CHOSEN--EDUCATION, ENGLISH, EXCLUDING RHET. 101 AND 102, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, LINGUISTICS, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR UNDERGRADUATES

FR 101 ELEMENTARY COURSE, I.
FOR STUDENTS WHO HAVE NO CREDIT IN FRENCH.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR FR. 101 WITHOUT FR. 102.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,
05873 LECT-DISC 10-12 MTU THF 262 L H

FR 102 ELEMENTARY COURSE, II.
PREREQUISITE--FR. 101 OR ONE YEAR OF HIGH SCHOOL FRENCH.
4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY, 202-204 LINCOLN HALL,
05881 LECT-DISC 8-10 MTU THF 262 L H

FR 103 MODERN FRENCH, I.
PREREQUISITE--FR. 102 OR TWO YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
05890 LECT-DISC 10-12 MTU THF 232 L H

FR 104 MODERN FRENCH, II.
PREREQUISITE--FR. 103 OR THREE YEARS OF HIGH SCHOOL FRENCH.
4 HOURS
05903 LECT-DISC 8-10 MTU THF 232 L H

COURSES FOR ADVANCED UNDERGRADUATES

FR 202 INTRODUCTION TO FRENCH LITERATURE, II.
PREREQUISITE--FR. 104 OR FOUR YEARS OF HIGH SCHOOL FRENCH.
3 HOURS
05911 LECT-DISC 1-3 M W F 329 G H BARRETTE

FR 211 ORAL FRENCH, I
PREREQUISITE--FR. 104, OR 103 AND 113, OR FOUR YEARS OF HIGH SCHOOL FRENCH. PRACTICE IN LANGUAGE LABORATORY IS REQUIRED.
3 HOURS
05920 LECT-DISC 10-12 M W F 308 L H

FR 212 ORAL FRENCH, II
PREREQUISITE--FR. 211. WITH PERMISSION, FR. 212 MAY BE TAKEN WITH 211 IN THE SUMMER SESSION.
3 HOURS
05938 LECT-DISC 1-3 TU THF 327 G H SAGI

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED UNDERGRADUATE COURSES IN FRENCH EXCEPT FR. 382 HAVE THE FOLLOWING PREREQUISITE--FR. 201 AND 202 OR EQUIVALENT.

FR 311 DICTION FRANCAISE.
IT IS RECOMMENDED THAT FR. 311 AND 313 BE TAKEN CONCURRENTLY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT
05946 LECT-DISC 10-12 M W F 325 G H

FR 313 PHONETIQUE DE LA LANGUE FRANCAISE.
IT IS RECOMMENDED THAT FR. 313 AND 311 BE TAKEN CONCURRENTLY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT
05954 LECT-DISC 1-3 M W F 325 G H JENKINS

FR 314 FRENCH SYNTAX.
PREREQUISITE--FR. 213 AND 214, OR EQUIVALENT.
3 HOURS OR 3/4 UNIT
05962 LECT-DISC 8-10 M W F 325 G H JENKINS

FR 323 LITTERATURE DU DIX-SEPTIEME SIECLE, I.
3 HOURS OR 3/4 UNIT

05971	LECT-DISC	3-5	M W F	327	G H		DE LEY

FR 334 LA LITTERATURE CONTEMPORAINE, II.
3 HOURS OR 3/4 UNIT

05989	LECT-DISC	1-3	M W	327	G H		GRAY

FR 335 FRENCH CIVILIZATION, I.
3 HOURS OR 3/4 UNIT

05997	LECT-DISC	3-5	M W F	325	G H		

FR 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS GER., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS OR 1/2 UNIT

06003	LECT-DISC	10	MTUWTH	210	L H		MYERS

COURSES FOR GRADUATES

FR 400 BEGINNING FRENCH FOR GRADUATE STUDENTS.
4 HOURS

06011	LECT-DISC	A1	8-10	MTU THF	329	G H	BAKER
06020	LECT-DISC	A2	8-10	MTU THF	327	G H	
06038	LECT-DISC	C1	10-12	MTU THF	329	G H	
06046	LECT-DISC	C2	10-12	MTU THF	327	G H	
06054	LECT-DISC	E	1-3	MTU THF	333	ARMORY	
06062	LECT-DISC	G	3-5	MTU THF	329	G H	

FR 401 READING FRENCH FOR GRADUATE STUDENTS.
PREREQUISITE--FR. 400, OR FR. 101 AND 102, OR EQUIVALENT.
4 HOURS

06071	LECT-DISC	A	8-10	MTU THF	331	G H	
06089	LECT-DISC	C	10-12	MTU THF	331	G H	
06097	LECT-DISC	E	1-3	MTU THF	331	G H	
06101	LECT-DISC	G	3-5	MTU THF	331	G H	

FR 425 EXPLICATION DE TEXTES, I.
PREREQUISITE--GRADUATE STANDING IN FRENCH.
1 UNIT

06119	LECT-DISC	1-3	TU TH	325	G H		JAHIEL

FR 460 SEMINAR IN FRENCH LITERATURE.
*COURSE MAY BE REPEATED FOR CREDIT.
*1 UNIT

06127	LECT-DISC	N	10-12	TU TH	325	G H	GRAY
06135	LECT-DISC	T	3-5	TU TH	304	G H	JOST

FR 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN FRENCH.
1/4 TO 1 UNIT

06143	CONF	ARR					

FR 499 THESIS RESEARCH.
0 TO 2 UNITS

06151	CONF	ARR					

GENERAL EDUCATION

STUDENTS WHO ENTER THE GENERAL CURRICULUM IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES OR WHO ENTER OTHER SCHOOLS AND SUBSEQUENTLY TRANSFER TO THE COLLEGE ARE REQUIRED TO COMPLETE AT LEAST ONE APPROVED SEQUENCE IN EACH OF THESE AREAS--HUMANITIES, BIOLOGICAL SCIENCE, PHYSICAL SCIENCE, AND SOCIAL SCIENCE.

THE FOLLOWING REGULATIONS APPLY TO THE FOREGOING SEQUENCES--

1--STUDENTS MUST COMPLETE AT LEAST ONE OF THESE SEQUENCES DURING THE FIRST YEAR OF STUDY.

2--STUDENTS WITH SOPHOMORE STANDING MUST COMPLETE AT LEAST ONE ADDITIONAL SEQUENCE DURING THE SECOND YEAR.

3--SOME OF THE SEQUENCES ARE AT THE ADVANCED LEVEL AND REQUIRE AT LEAST JUNIOR STANDING. SUCH COURSES COUNT TOWARD ADVANCED HOURS REQUIRED FOR GRADUATION.

4--A STUDENT NEED NOT SATISFY A SEQUENCE IN THE AREA IN WHICH HIS MAJOR DEPARTMENT IS CLASSIFIED. FOR EXAMPLE, IF HIS MAJOR IS CHEMISTRY, THE STUDENT DOES NOT TAKE A GENERAL EDUCATION SEQUENCE IN PHYSICAL SCIENCE. IF HIS MAJOR IS ENGLISH, THEN NO OTHER SEQUENCE IS REQUIRED IN HUMANITIES. THE SAME IS TRUE FOR OTHER AREAS. CONSEQUENTLY, A FRESHMAN SHOULD ENROLL IN A SEQUENCE WHICH DOES NOT DUPLICATE HIS INTENDED MAJOR, AND FINAL DECISION ON THE MAJOR FIELD SHOULD BE MADE AT THE BEGINNING OF THE SOPHOMORE YEAR IF POSSIBLE.

5--IN SO FAR AS POSSIBLE, THE SEQUENCES SHOULD BE CHOSEN FROM COURSES APPROVED BY THE COLLEGE. AUTHORITY FOR SUBSTITUTIONS IN THE SEQUENCE REQUIREMENTS MUST BE OBTAINED FROM ONE OF THE DEANS. THE FOLLOWING HAVE BEEN APPROVED.

BIOLOGICAL SCIENCE

D G S 131, 132
PHYSL 103 OR 203, PSYCH 103
OR 8 HOURS IN ANY TWO OF THE FOLLOWING--

BOT 100	PHYSL 103 OR 203
ENTOM 103	ZOOL 104
MCBIO 100 AND 101	

HUMANITIES

A SIX HOUR SEQUENCE IN ONE FOREIGN LITERATURE AT THE 200 AND 300 LEVEL--NOT LANGUAGE COURSES.

ART 111, 112, PLUS EITHER A 300 COURSE IN HISTORY OF	HIST 131, 132
ART OR PHIL 323	HIST 191, 192
CLCIV 301, 302	HIST 323, 324
D G S 161, 162	HUMAN 151, 152
ENGL 101, 102, 103	HUMAN 211, 212
	HUMAN 215, 216
ENGL 105, 106	HUMAN 363, 364
ENGL 121, 122, 123	MUSIC 130, 131 PLUS
ENGL 251, 252, 253, 287	EITHER 312 OR 313
ANY TWO OR THREE OF THE FOUR	PHIL 101, 102, 105
COURSES, 6 OR 9 HOURS--	PHIL 303, 306
ENGL 338, 339, 340--ANY	RUSS 309, 310--6 HOURS--
TWO OR ALL THREE COURSES,	SPEECH 177, 178
6 OR 9 HOURS--	

PHYSICAL SCIENCE

ASTR 101, 102	GEOG 101, 111
	GEOL 101, 102
CHEM, ANY 8 HOURS	MATH 118, 119 OR ANY OTHER 8 HOUR SEQUENCE NOT INCLUDING MATH. 118.
D G S 141, 142	PHYCS, ANY 8 HOURS

SOCIAL SCIENCE

ANTH 102, 103	HIST 111, 112
D G S 121, 122	HIST 151, 152
D G S 151, 152	HIST 191, 192
D G S 171, 172	HIST 260, 261, 262
ECON 108 AND	PHIL 103, 104
ANY ONE OR TWO OF THE	POL S 184, 191
FOLLOWING COURSES--	POL S 191, 192
ECON 214, 228, 240,	PSYCH 100, 201
250, 255, 288	SOC 100, 218
GEOG 104, 105	SOC 151, 152

A STUDENT MAY NOT USE MORE THAN ONE SEQUENCE FROM ANY ONE DEPARTMENT TO SATISFY THE GENERAL EDUCATION REQUIREMENTS.

A STUDENT MAY NOT USE MORE THAN ONE SIX-HOUR OR SEVEN-HOUR SEQUENCE TO SATISFY THE GENERAL EDUCATION REQUIREMENTS.

ANY STUDENT WHO HAS COMPLETED THE SIX COURSES PRESCRIBED BY THE DIVISION OF GENERAL STUDIES HAS SATISFIED ALL THE GENERAL EDUCATION SEQUENCE REQUIREMENTS IN THE SCIENCES AND LETTERS CURRICULUM.

GENERAL ENGINEERING

DEPARTMENT OFFICE 117 T B

G E 010 SUMMER SCIENCE TRAINING PROGRAM FOR HIGH SCHOOL STUDENTS. THIS PROGRAM IS DESIGNED TO FAMILIARIZE SELECTED HIGH SCHOOL STUDENTS WITH PAST ACHIEVEMENTS, CURRENT RESEARCH AND PRACTICE, AND FUTURE NEEDS IN SCIENCE AND ENGINEERING. ENROLLMENT IS LIMITED TO SUCCESSFUL APPLICANTS TO A 6 WEEK SUMMER SCIENCE TRAINING PROGRAM SPONSORED BY THE NATIONAL SCIENCE FOUNDATION TO BE HELD FROM JUNE 26 TO AUGUST 4. NO CREDIT.

06160	LAB-DISC	A	8-12	MTUWTHF	216	T B	DOBROVOLNY,
		A	1-4	MTUWTHF	216	T B	REYES-GUERRA,
		A	8-12	MTUWTHF	201	T B	AND OTHERS
		A	1-4	MTUWTHF	201	T B	

COURSES FOR UNDERGRADUATES

G E 103 ENGINEERING GRAPHICS, I.
*CREDIT IS NOT GIVEN FOR G. E. 103 IN ADDITION TO G. E. 101 OR 105.
*3 HOURS

06178	LAB-DISC	A4	7-9	MTUWTHFS	306	T B
06186	LAB-DISC	B11	10-12	MTUWTHFS	114	T B

COURSES FOR ADVANCED UNDERGRADUATES

G E 220 HISTORY OF ENGINEERING.
PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS

06194	LECT-DISC	E	1-220	MTU THF	139	P B

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

G E 393 SPECIAL PROBLEMS.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
1 TO 4 HOURS, OR 1/2 TO 1 UNIT
*SECTIONS A AND S ARE RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA.
SECTION A COVERS APPLIED MATHEMATICS FOR ELECTRICAL SYSTEMS.
CREDIT--4 HOURS OR 1 UNIT.
SECTION S IS A TECHNICAL EDUCATION SEMINAR.
CREDIT--1 HOUR OR 1/4 UNIT.

06208	LECT-DISC	*A	11	M W F	136	P B	PLACEK
		*A	1	TU TH	136	P B	
06216	LECT-DISC	*S	10-12	TU TH	144	P B	DOBROVOLNY, AND OTHERS

GEOGRAPHY

DEPARTMENT OFFICE 220 D H

MAJOR--TWENTY HOURS IN GEOGRAPHY IN ADDITION TO GEOGRAPHY 101. AT LEAST FIFTEEN OF THE TWENTY HOURS MUST BE IN COURSES CARRYING ADVANCED CREDIT. INDIVIDUAL PROGRAMS ARE ARRANGED FOR MAJOR STUDENTS WITH THE FOLLOWING SPECIAL INTERESTS--LIBERAL EDUCATION, BUSINESS, CARTOGRAPHY, GOVERNMENT, TEACHING, OR GRADUATE STUDY. THESE PROGRAMS INCLUDE DEPARTMENTAL COURSES, MINOR FIELDS, AND RECOMMENDED ELECTIVES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS IN DEPARTMENTS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED IN CONSULTATION WITH THE DEPARTMENTAL ADVISER AND WITH THE APPROVAL OF THE DEAN OF THE COLLEGE. AT LEAST EIGHT HOURS OF THE TWENTY MINOR HOURS MUST BE TAKEN IN EACH IF THE STUDENT ELECTS TO MINOR IN TWO DIFFERENT DEPARTMENTS.

DEPARTMENTAL DISTINCTION--STUDENTS ELIGIBLE FOR GRADUATION WITH HONORS IN LIBERAL ARTS AND SCIENCES SHOULD CONSULT WITH THE DEPARTMENTAL ADVISER CONCERNING GRADUATION WITH DISTINCTION IN GEOGRAPHY.

COURSES FOR UNDERGRADUATES

GEOG 101 ELEMENTS OF GEOGRAPHY.
5 HOURS

06224	LECT	D	11	MTUWTH	323	D H	CROSS
	QUIZ	D	3-5	TUWTH	323	D H	

GEOG 104 WORLD REGIONAL GEOGRAPHY.
4 HOURS

06232	LECT	A	8-10	TUWTHF	159	D H	GARLAND

GEOG 105 INTRODUCTORY ECONOMIC GEOGRAPHY.
4 HOURS

06241	LECT	B	9-11	MTUWTH	323	D H	ROEPKE

GEOG 185 INTRODUCTION TO SOCIAL STATISTICS.
SAME AS SOC. 185.
PREREQUISITE--SOC. 100, OR CONSENT OF INSTRUCTOR, OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS

06259	LECT-DISC	A	1-3	TUWTH	111	G H	SALTIEL

COURSES FOR ADVANCED UNDERGRADUATES

GEOG 214 CONSERVATION OF NATURAL RESOURCES.
3 HOURS
06267 LECT-DISC A 750-850 MTUWTHF 323 D H CROSS

GEOG 272 INTRODUCTORY FIELD GEOGRAPHY.
PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
*AMOUNT OF CREDIT DEPENDS ON DURATION OF CAMP.
*5 TO 8 HOURS
06275 LAB ARR
FIELD CAMP METROPOLIS, ILLINOIS ARMSTRONG AND ALEXANDER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOG 371 INTRODUCTION TO RESEARCH, I.
PREREQUISITE--GEOGRAPHY MAJOR OR SENIOR STANDING WITH A MINIMUM OF 12 HOURS OF GEOGRAPHY.
3 HOURS OR 3/4 UNIT
06283 LECT-DISC ARR GARLAND

COURSES FOR GRADUATES

GEOG 478 ADVANCED FIELD GEOGRAPHY.
PREREQUISITE--GRADUATE STANDING IN GEOGRAPHY.
1 1/4 TO 2 UNITS
06291 LAB ARR
FIELD CAMP METROPOLIS, ILLINOIS ARMSTRONG AND ALEXANDER

GEOG 495 ADVANCED STUDIES IN GEOGRAPHY.
1/2 TO 2 UNITS
*PROBLEMS OF GEOGRAPHIC STUDY
A ALEXANDER
B ARMSTRONG
F GARLAND
G ROEPKE

06305	CONF	*A	ARR	ALEXANDER
06313	CONF	*B	ARR	ARMSTRONG
06321	CONF	*F	ARR	GARLAND
06330	CONF	*G	ARR	ROEPKE

GEOG 499 THESIS RESEARCH.
0 TO 2 UNITS
06348 CONF ARR ROEPKE

DEPARTMENT OFFICE 234 N H

MAJOR--TWENTY HOURS IN GEOLOGY, EXCLUDING GEOL. 101, PHYSICAL GEOLOGY, 105, AGRICULTURAL GEOLOGY, AND 150, GEOLOGY FOR ENGINEERS. THE FOLLOWING COURSES, IN ADDITION TO GEOL. 101, PHYSICAL GEOLOGY, ARE FUNDAMENTAL FOR A MAJOR IN GEOLOGY--102, HISTORICAL GEOLOGY, 131 AND 132, MINERALOGY, 301, GEOMORPHOLOGY, 311, STRUCTURAL GEOLOGY 320, PALEONTOLOGY, 321, STRATIGRAPHY, 317, FIELD GEOLOGY IN THE ROCKY MOUNTAINS, G E 205, APPLIED DESCRIPTIVE GEOMETRY IN GEOLOGICAL PROBLEMS, CHEM. 101 OR 102, GENERAL CHEMISTRY, PHYSICS 101, GENERAL PHYSICS, MATH. 112, COLLEGE ALGEBRA, MATH. 114, TRIGONOMETRY, AND MATH. 123 OR 122, ANALYTIC GEOMETRY.

STUDENTS ARE ADVISED TO TAKE MATH. 132 AND 142, OR MATH. 133 AND 143, CALCULUS, AND PHYCS. 102-GENERAL PHYSICS.

STUDENTS WHOSE PRIMARY INTEREST IS MINERALOGY, PETROLOGY, AND MINERAL DEPOSITS SHOULD ALSO TAKE CHEM. 102, INORGANIC CHEMISTRY, AND CHEM. 245 AND 246, PHYSICAL CHEMISTRY FOR ENGINEERS, OR THE EQUIVALENT. IT IS ALSO ADVISABLE FOR SUCH STUDENTS TO TAKE GEOL. 335-OPTICAL MINERALOGY, AND GEOL. 336-PETROGRAPHY, DURING THE SENIOR YEAR.

MINORS--TWENTY HOURS CHOSEN FROM ONE OR TWO OF THE FOLLOWING SUBJECTS--ASTRONOMY, BOTANY, CHEMISTRY, CIVIL ENGINEERING, ECONOMICS, GEOGRAPHY, MATHEMATICS, MINING ENGINEERING, PHYSICS, AND ZOOLOGY, AFTER CONSULTATION WITH THE DEPARTMENT OF GEOLOGY. AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH SUBJECT IF TWO ARE CHOSEN.

DEPARTMENTAL DISTINCTION--ONLY THOSE STUDENTS WHO HAVE CREDIT IN GEOL. 290 AND WRITE A THESIS ARE RECOMMENDED FOR GRADUATION WITH DEPARTMENTAL DISTINCTION. EACH STUDENT WHO DESIRES TO REGISTER MUST OBTAIN A WRITTEN STATEMENT FROM THE INSTRUCTOR UNDER WHOM HE IS TO WORK AND PRESENT IT TO THE HEAD OF THE DEPARTMENT AT THE TIME OF REGISTRATION.

NOTE--CERTAIN GEOLOGY COURSES ARE OFFERED ONLY IN ALTERNATE YEARS--324, VERTEBRATE PALEONTOLOGY, 401, ADVANCED DYNAMIC GEOLOGY, 402, ADVANCED HISTORICAL GEOLOGY.

AT LEAST ONE YEAR OF GRADUATE WORK IS NECESSARY AS FURTHER TRAINING FOR ALL PROFESSIONAL WORK IN GEOLOGY.

COURSES FOR ADVANCED UNDERGRADUATES

GEOL 290 INTRODUCTION TO RESEARCH.
CREDIT TO BE ARRANGED.
06356 CONF £A ARR STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GEOL 317 FIELD GEOLOGY IN THE ROCKY MOUNTAINS.
PREREQUISITE--GEOL. 102 AND CONSENT OF INSTRUCTOR.
FIELD TRIP, APPROXIMATE COST $325 TO $470.
8 HOURS OR 2 UNITS
06364 LAB-DISC ARR JOHNSON AND OTHERS

COURSES FOR GRADUATES

GEOL 493 ADVANCED STUDIES IN GEOLOGY.
1/2 TO 2 UNITS
A--CLAY MINERALOGY
B--ENGINEERING GEOLOGY
C--GEOMORPHOLOGY AND GLACIAL GEOLOGY
D--GEOTECTONICS
E--GROUND-WATER GEOLOGY
F--MICROPALEONTOLOGY
G--MINERAL DEPOSITS
H--MINERALOGY AND CRYSTALLOGRAPHY
I--PALEOBOTANY--SEE BOT. 493
J--PALEONTOLOGY
K--PENNSYLVANIAN STRATIGRAPHY
L--PETROGRAPHY AND PETROLOGY
M--SEDIMENTARY PETROLOGY
N--STRATIGRAPHY
O--OCEANOGRAPHY AND OCEAN ENGINEERING
P--SUBMARINE GEOLOGY
Q--STRUCTURAL GEOLOGY

06372	CONF	A	ARR	GRIM, WAHL
06381	CONF	B	ARR	DEERE RICHARDS
06399	CONF	C	ARR	SHAFFER, WHITE
06402	CONF	D	ARR	CAROZZI
06411	CONF	E	ARR	FARVOLDEN
06429	CONF	F	ARR	SANDBERG
06437	CONF	G	ARR	HAGNER
06445	CONF	H	ARR	HENDERSON
06453	CONF	I	ARR	
06461	CONF	J	ARR	HAY
06470	CONF	K	ARR	WANLESS
06488	CONF	L	ARR	CHAPMAN
06496	CONF	M	ARR	CAROZZI RICHARDS, WANLESS
06500	CONF	N	ARR	LANGENHEIM
06518	CONF	O	ARR	RICHARDS
06526	CONF	P	ARR	RICHARDS
06534	CONF	Q	ARR	DONATH

GEOL 499 THESIS RESEARCH.
0 TO 2 UNITS

06542	CONF		ARR	STAFF

GERMANIC LANGUAGES AND LITERATURES

DEPARTMENT OFFICE 371 L H

MAJOR--TWENTY-FOUR HOURS IN GERMAN, EXCLUDING GERMAN 101, 102, 103, 104, AND 113, AND INCLUDING GERMAN 302, 303, 320, AND ONE OTHER LITERATURE COURSE AT THE 300-LEVEL.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO SUBJECTS CHOSEN FROM THE FOLLOWING LIST, WITH AT LEAST EIGHT HOURS IN EACH SUBJECT--EDUCATION, ENGLISH--EXCLUDING RHET. 101, 102, AND 200--FRENCH, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, LINGUISTICS--EXCLUDING LING. 301--MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN AND SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, RUSS. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT LANGUAGE.

COURSES FOR UNDERGRADUATES

GER 101 ELEMENTARY COURSE, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR GER. 101 WITHOUT GER. 102.
*4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR FOUR HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY--TIME TO BE ARRANGED.

06551	LECT-DISC	E	1-3	MTUWTH	1 G H

GER 102 ELEMENTARY COURSE, II.
PREREQUISITE--GER. 101 OR ONE YEAR OF HIGH SCHOOL GERMAN.
4 HOURS
ALL STUDENTS IN THIS COURSE MUST ARRANGE WITH THE INSTRUCTOR TO REGISTER FOR FOUR HALF-HOUR PERIODS OF WORK WEEKLY IN THE LANGUAGE LABORATORY--TIME TO BE ARRANGED.

06569	LECT-DISC	E	1-3	MTUWTH	9	G H	

GER 103 INTERMEDIATE COURSE, I.
PREREQUISITE--GER. 102, TWO YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS
STUDENTS MUST REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

06577	LECT-DISC	C	10-12	MTUWTH	9	G H	ABRAHAM, HOLST

GER 104 INTERMEDIATE COURSE, II.
PREREQUISITE--GER. 103, OR THREE YEARS OF HIGH SCHOOL GERMAN, OR EQUIVALENT.
4 HOURS

06585	LECT-DISC	A	8-10	MTUWTH	9	G H	

COURSES FOR ADVANCED UNDERGRADUATES

GER 210 MASTERPIECES OF GERMAN LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GERMAN OR EQUIVALENT.
3 HOURS

06593	LECT-DISC	A	8	MTUWTHFS	1	G H	ABRAHAM

GER 211 CONVERSATION AND WRITING, I.
PREREQUISITE--GER. 103 AND 113, OR GER. 104, OR EQUIVALENT.
3 HOURS

06607	LECT-DISC	G	3-5	MTUWTH	9	G H	HOLST

GER 212 CONVERSATION AND WRITING, II.
PREREQUISITE--GER. 211 OR EQUIVALENT OR CONSENT OF INSTRUCTOR.
3 HOURS

06615	LECT-DISC	E	1-3	MTUWTH	4	G H	GRAUBART

GER 260 LYRICS AND BALLADS.
PREREQUISITE--GER. 210 OR EQUIVALENT.
3 HOURS

06623	LECT-DISC	B	9	MTUWTHFS	1	G H	LORBE

GER 291 SENIOR THESIS AND HONORS COURSE, I.
PREREQUISITE--SENIOR STANDING, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS

06631	CONF		ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GER 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., RUSS., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS OR 1/2 UNIT

06640	LECT-DISC		10	MTUWTH	210	L H	MYERS

GER 392 TOPICS IN GERMAN LITERATURE.
PREREQUISITE--TWO ADVANCE COURSES IN GERMAN LITERATURE.
4 HOURS, OR 1 TO 2 UNITS
TOPIC--E. T. A. HOFFMAN.

06658	LECT-DISC	C	10	MTUWTHFS	1	G H	NOCK

COURSES FOR GRADUATES

GER 400 BEGINNING GERMAN FOR GRADUATE STUDENTS.
4 HOURS

06666	LECT-DISC	A	8-10	MTUWTH	162	L H	
06674	LECT-DISC	C	10-12	MTUWTH	4	G H	
06682	LECT-DISC	E	1-3	MTUWTH	388	L H	
06691	LECT-DISC	G	3-5	MTUWTH	4	G H	GRAY
06704	LECT-DISC	K	7-9PM	MTUWTH	4	G H	

GER 401 READINGS IN GERMAN FOR GRADUATE STUDENTS.
PREREQUISITE--GER. 400 OR EQUIVALENT.
4 HOURS
*SECTIONS A1, C, G1, AND K1 DO READINGS PARTICULARLY IN THE NATURAL SCIENCES. SECTIONS A2, E, G2, AND K2 DO READINGS IN THE HUMANITIES AND THE SOCIAL SCIENCES.

06712	LECT-DISC	*A1	8-10	M W F	3	G H	GRAUBART
06755	LECT-DISC	*A2	8-10	M W F	4	G H	ANTONSEN
06721	LECT-DISC	*C	10-12	M W F	3	G H	VAN DEN BERGH
06763	LECT-DISC	*E	1-3	M W F	3	G H	NOCK
06739	LECT-DISC	*G1	3-5	M WTH	3	G H	VAN DEN BERGH
06771	LECT-DISC	*G2	3-5	M WTH	1	G H	MILLER
06747	LECT-DISC	*K1	7-9PM	M WTH	3	G H	GRAY
06780	LECT-DISC	*K2	7-9PM	M WTH	1	G H	MILLER

GER 415 MIDDLE HIGH GERMAN.
1 UNIT

06798	LECT-DISC	D	11	MTUWTHFS	1	G H	ANTONSEN

GER 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS

06801	CONF		ARR				STAFF

GREEK

DEPARTMENT OFFICE 361 L H

MAJOR--TWENTY HOURS. IN ADDITION CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, LATIN BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

CREDIT FOR NEW TESTAMENT GREEK TRANSFERRED FROM OTHER INSTITUTIONS IS NOT COUNTED TOWARD A MAJOR OR MINOR UNTIL AFTER THE SATISFACTORY COMPLETION OF GREEK 201-202 AND THEN ONLY TO A POSSIBLE MAXIMUM OF EIGHT HOURS AS THE EQUIVALENT OF GREEK 101-102 AND THREE HOURS AS THE EQUIVALENT OF ONE SEMESTER OF GREEK 391.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

GRK 391 READINGS IN GREEK LITERATURE.
PREREQUISITE--TWO YEARS OF COLLEGE GREEK, CONSENT OF INSTRUCTOR.
*MAY BE REPEATED FOR MAXIMUM OF 12 HOURS CREDIT.
*3 HOURS OR 3/4 UNIT

06810	LECT-DISC	A	9-11	M W F	409	LIB	NAOUMIDES

COURSES FOR GRADUATES

UNLESS OTHERWISE NOTED, THE PREREQUISITE TO ALL COURSES IS THREE YEARS OF COLLEGE GREEK.

GRK 499 THESIS RESEARCH.
0 TO 2 UNITS

06828	CONF		ARR		360	L H	STAFF

HEALTH EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

```
H ED  281     FIRST AID.
        2 HOURS
        *ONE ADDITIONAL HOUR OF LAB TO BE ARRANGED.
      06836       LECT-DISC  D       *11        MTUWTH     133  ARMORY        CONLEY

H ED  282     ORGANIZATION OF SCHOOL HEALTH PROGRAMS.
        3 HOURS
        *ONE ADDITIONAL HOUR OF LAB PER WEEK TO BE ARRANGED IN 212A H G.
      06844       LECT-DISC *A         7-9      MTU        207  H G            CONLEY
                            *A         8           WTH     207  H G
```

COURSES FOR GRADUATES

```
H ED  404     TRENDS AND ISSUES IN SEX EDUCATION.
        PREREQUISITE--UNDERGRADUATE COURSES BEYOND THE ELEMENTARY LEVEL
        IN BIOLOGICAL AND SOCIAL SCIENCES OR CONSENT OF INSTRUCTOR.
        1 UNIT
      06852       LECT-DISC  D        11        MTUWTH     207A H G            HOYMAN

H ED  490     SEMINAR.
        NO CREDIT
      06861       LECT-DISC         ARR                                         HOYMAN

H ED  499     THESIS RESEARCH.
        1/2 TO 2 UNITS
      06879       CONF              ARR                                         HOYMAN AND
                                                                                FLORID
```

HEALTH SCIENCE

DEPARTMENT OFFICE HEALTH CENTER

COURSES FOR ADVANCED UNDERGRADUATES

```
HL SC 200     MENTAL HEALTH.
        2 HOURS
      06887       LECT-DISC  D        11        MTUWTH     393  BEV HALL        STUBING

HL SC 206     SEX EDUCATION AND FAMILY LIFE.
        PREREQUISITE--JUNIOR STANDING OR CONSENT OF INSTRUCTOR.
        2 HOURS
        INSTRUCTORS TEACHING HL. SC. 206 ARE AKERS, CAVINS,
        MILLER, RASMUSSEN, AND TEIGLER.
      06895       LECT-DISC  B         9        MTUWTH     393  BEV HALL        TEIGLER
      06909       LECT-DISC  C        10        MTUWTH     393  BEV HALL        TEIGLER
```

HINDI

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES

HINDI 207 ELEMENTARY HINDI-URDU.
SAME AS URDU 207.
8 HOURS
MEETS JUNE 20 THROUGH AUGUST 25.

06917	LECT-DISC	8-10	MTUWTHF	219	G H		ULLRICH
		1	MTUWTH	219	G H		ULLRICH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

HINDI 307 INTERMEDIATE HINDI.
PREREQUISITE--HINDI 207.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

06925	LECT-DISC	10-12	MTUWTH	219	G H		DWARIKESH

HINDI 309 ADVANCED HINDI.
PREREQUISITE--HINDI 307 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

06933	LECT-DISC	10-12	MTUWTH	148	ADMIN		DWARIKESH

HINDI 310 INTRODUCTION TO BHAKTI LITERATURE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

06941	LECT-DISC	11	MTUWTHFS	113	G H		KACHRU

HISTORY

DEPARTMENT OFFICE 359 ARMORY

MAJOR--TWENTY-FOUR HOURS IN HISTORY, ALL IN COURSES HAVING JUNIOR STANDING AS A PREREQUISITE--ONE FRESHMAN-SOPHOMORE SURVEY COURSE SEQUENCE-HISTORY 111-112, 131-132, 151-152, 181-182, 191-192, DGS 121-122--OR ITS EQUIVALENT, MUST BE TAKEN AS A PREREQUISITE TO THE MAJOR. THE COURSES OFFERED MUST INCLUDE AT LEAST TWELVE HOURS IN AN AREA OF SPECIALIZATION AND AT LEAST SIX HOURS IN A SECOND AREA. THE FOLLOWING AREAS MAY BE SELECTED--ANCIENT MEDIEVAL AND RENAISSANCE, EUROPE SINCE 1500, UNITED STATES AND LATIN AMERICA, ASIA. ALL MAJORS ARE REQUIRED TO TAKE HISTORY 298. TO BE ELIGIBLE FOR THIS COURSE, EACH MAJOR MUST HAVE HAD AT LEAST FOURTEEN HOURS IN HISTORY, SIX OF WHICH MUST BE IN COURSES ON THE ADVANCED LEVEL.

MINORS--TWENTY HOURS, NOT INCLUDING MORE THAN FOUR HOURS OPEN TO FRESHMEN, IN ONE OR TWO OF THE FOLLOWING--ANCIENT OR MODERN LANGUAGE EXCLUDING ELEMENTARY COURSES 101 AND 102, ANTHROPOLOGY, ECONOMICS, ENGLISH AND AMERICAN LITERATURE, GEOGRAPHY, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, AND SOCIOLOGY. ONE OF THE CURRICULA IN LATIN AMERICAN STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, ASIAN STUDIES OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR, EXCLUDING THE COURSES IN HISTORY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 121 AND 122, HISTORY OF CIVILIZATION, ARE ACCEPTED AS SATISFYING THE PREREQUISITE OF A YEAR OF COLLEGE HISTORY IN ALL CASES IN WHICH IT IS REQUIRED.

HIST 112 HISTORY OF WESTERN CIVILIZATION, 1815 TO THE PRESENT.
4 HOURS

06950	LECT		9	MTUWTH	328	ARMORY	STEVENS
06968	DISC	A	11	MTUWTH	329	ARMORY	
06976	DISC	B	1	MTUWTH	329	ARMORY	

HIST 152 HISTORY OF THE UNITED STATES FROM 1865 TO THE PRESENT.
*CREDIT IS NOT GIVEN FOR BOTH HIST. 152 AND 262.
*4 HOURS

06984	LECT		8	MTUWTH	213	G H	STRICKLAND
06992	DISC	A	10	MTUWTH	329	ARMORY	
07009	DISC	B	10	MTUWTH	332	ARMORY	
07017	DISC	C	11	MTUWTH	330	ARMORY	
07025	DISC	D	11	MTUWTH	331	ARMORY	

HIST 181 THE ANCIENT WORLD.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR.
3 HOURS

07033	LECT		9	MTUWTH	329	ARMORY	MITCHELL
07041	DISC	A	1	MTUWTH	331	ARMORY	

COURSES FOR ADVANCED UNDERGRADUATES

HIST 295 READING COURSE.
PREREQUISITE--JUNIOR OR SENIOR OF HIGH STANDING.
2 TO 4 HOURS

07050	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ONE YEAR OF COLLEGE HISTORY IS REQUIRED EXCEPT WHERE NOTED.

HIST 305 THE AGE OF THE RENAISSANCE.
3 HOURS, OR 1/2 OR 1 UNIT

07068	LECT		9	MTUWTHFS	333	ARMORY	GEANAKOPLOS

HIST 310 THE DEVELOPMENT OF MODERN EUROPE--THE FRENCH REVOLUTION AND NAPOLEON, 1789 TO 1815.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

07076	LECT		10	MTUWTHFS	328	ARMORY	SIRICH

HIST 311 EUROPEAN HISTORY FROM 1815 TO 1871.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY, POLITICAL SCIENCE, OR ECONOMICS.
3 HOURS, OR 1/2 OR 1 UNIT

07084	LECT		11	MTUWTHFS	333	ARMORY	STEVENS

HIST 332 MEDIEVAL ENGLAND.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

07092	LECT		11	MTUWTHFS	49	L I R	HILL

HIST 342 MODERN BRITAIN SINCE 1900.
3 HOURS, OR 1/2 OR 1 UNIT

07106	LECT		8	MTUWTHFS	328	ARMORY	ERICKSON

HIST 352 COLONIAL BEGINNINGS OF AMERICAN LIFE AND INSTITUTIONS.
3 HOURS, OR 1/2 OR 1 UNIT

07114	LECT		8	MTUWTHFS	333	ARMORY	STEARNS

HIST 361 HISTORY OF THE UNITED STATES, 1909-1932.
PREREQUSITE--ONE YEAR OF COLLEGE HISTORY, POLITICAL SCIENCE OR ECONOMICS.
3 HOURS, OR 1/2 OR 1 UNIT

07122	LECT	10	MTUWTHFS	333	ARMORY	STRICKLAND

HIST 383 HISTORY OF THE ROMAN REPUBLIC TO 44 B. C.
3 HOURS, OR 1/2 OR 1 UNIT

07131	LECT	11	MTUWTHFS	332	ARMORY	MITCHELL

HIST 387 INDIAN HISTORY AND CIVILIZATION TO 1707.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

07149	LECT	4	MTUWTHF	100	G H	BEGLEY

HIST 388 DEVELOPMENT OF MODERN INDIA AND PAKISTAN FROM 1707.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

07157	LECT	3	MTUWTHF	321	G H	ZELLIOT

HIST 389 PROBLEMS OF CONTEMPORARY SOUTH ASIA.
PREREQUISITE--ONE YEAR OF COLLEGE HISTORY OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

07165	LECT	11	MTUWTHF	321	G H	ZELLIOT

COURSES FOR GRADUATES

HIST 415 SEMINAR IN MEDIEVAL HISTORY.
1 UNIT

07173	DISC	3-5	TU TH	424B	LIB	GEANAKOPLOS

HIST 419 SEMINAR IN EUROPEAN HISTORY, 1648-1815.
1 UNIT

07181	DISC	1-3	TU TH	303	ARMORY	SIRICH

HIST 423 SEMINAR IN ENGLISH HISTORY TO 1688.
1 UNIT

07190	DISC	2-4	M W	49	L I R	HILL

HIST 425 SEMINAR IN ENGLISH AND BRITISH EMPIRE HISTORY SINCE 1688.
1 UNIT

07203	DISC	1-3	M W	424A	LIB	ERICKSON

HIST 453 SEMINAR IN AMERICAN HISTORY SINCE 1789.
1 UNIT

07211	DISC	A	1-3	M W	303	ARMORY	STEARNS
07220	DISC	B	3-5	M W	303	ARMORY	JOHANNSEN

HIST 461 SEMINAR IN LATIN-AMERICAN HISTORY.
1 UNIT
*SECTION A TOPIC--BRAZIL.
*SECTION B TOPIC--MEXICO.
*REGISTRATION RESTRICTED TO MEMBERS OF NDEA LATIN AMERICAN HISTORY INSTITUTE.

07238	DISC	*A	8-10	MTUWTH	43	L I R	BERNSTEIN
07246	DISC	*B	8-10	MTUWTH	182	ARMORY	LOVE

HIST 497 READING COURSE.
PREREQUISITE--MASTERS DEGREE OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

07254	CONF	ARR	STAFF

HIST 499 THESIS RESEARCH.
0 TO 2 UNITS

07262	CONF	ARR	STAFF

HISTORY AND PHILOSOPHY OF EDUCATION

DEPARTMENT OFFICE 369 EDUC

COURSES FOR ADVANCED UNDERGRADUATES

HP ED 201 FOUNDATIONS OF AMERICAN EDUCATION.
PREREQUISITE--EL. ED. 101 OR SE. ED. 101 OR VOTEC. 101, PSYCH. 100.
2 HOURS

07271	LECT-DISC	A	8	TUWTHF	242	ARMORY	
07289	LECT-DISC	B	9	TUWTHF	106	D K H	
07297	LECT-DISC	C	10	TUWTHF	113	D K H	
07301	LECT-DISC	D	11	TUWTHF	209	D K H	

HP ED 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

07319	CONF		ARR				

HP ED 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

07327	CONF		ARR				

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

HP ED 301 PHILOSOPHY OF EDUCATION.
2 HOURS OR 1/2 UNIT

07335	LECT-DISC		8	TUWTHF	162	EDUC	MCMURRAY

HP ED 302 HISTORY OF AMERICAN EDUCATION.
2 HOURS OR 1/2 UNIT

07343	LECT-DISC		10	TUWTHF	91	COM W	MEYER

HP ED 303 COMPARATIVE EDUCATION.
2 HOURS OR 1/2 UNIT

07351	LECT-DISC		11	TUWTHF	219	D K H	YATES

HP ED 304 SOCIAL FOUNDATIONS OF EDUCATION.
2 HOURS OR 1/2 UNIT
•THIS SECTION LIMITED TO STUDENTS IN SPECIAL FOUR-WEEK PROGRAMS ONLY.
ADMITTANCE ONLY BY SIGNATURE OF DEPARTMENT CHAIRMAN.

07360	LECT-DISC	A1	8	TUWTHF	433	ARMORY	DANIELS
07378	LECT-DISC	A2	8	TUWTHF	305	G H	SMITH
07386	LECT-DISC	B1	9	TUWTHF	313	G H	
07394	LECT-DISC	B2	9	TUWTHF	330	ARMORY	COOMBS
07408	LECT-DISC	B3	9	TUWTHF	8	COM W	
07416	LECT-DISC	C1	10	TUWTHF	136	ARMORY	COOMBS
07424	LECT-DISC	C2	10	TUWTHF	106	D K H	
07459	LECT-DISC	•C3	10-12	TUWTHF	108	D K H	STANLEY
07432	LECT-DISC	D1	11	TUWTHF	106	D K H	VAN CLEVE
07441	LECT-DISC	F	2	TUWTHF	162	EDUC	VAN CLEVE

HP ED 305 HISTORY OF EDUCATIONAL IDEAS.
2 HOURS OR 1/2 UNIT

07467	LECT-DISC	A1	8	TUWTHF	243	ARMORY	
07475	LECT-DISC	A2	8	TUWTHF	43	G H	MASON
07483	LECT-DISC	B1	9	TUWTHF	108	D K H	
07491	LECT-DISC	B2	9	TUWTHF	113	D K H	KAULFERS
07505	LECT-DISC	B3	9	TUWTHF	115	D K H	
07513	LECT-DISC	C1	10	TUWTHF	115	D K H	MASON
07521	LECT-DISC	C2	10	TUWTHF	125	D K H	KAZEPIDES
07530	LECT-DISC	D1	11	TUWTHF	43	G H	MEYER
07548	LECT-DISC	D2	11	TUWTHF	222	D K H	KAULFERS
07556	LECT-DISC	F	2	TUWTHF	332	ARMORY	KAZEPIDES

HP ED 405 FOUNDATIONS OF AESTHETIC EDUCATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

07564	LECT-DISC		9	TUWTHF	91	COM W	BROUDY

HP ED 407 LOGICAL FOUNDATIONS OF METHODS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

07572	LECT-DISC		11	TUWTHF	385	EDUC	MCMURRAY

HP ED 410 SEMINAR IN THEORIES OF EDUCATIONAL AND SOCIAL CHANGE.
ONLY OPEN TO CANDIDATES FOR THE ED. D. OR PH. D. IN EDUCATION.
1 UNIT

07581	LECT-DISC	E	2-4	TU TH	389	EDUC	BURNETT, STANLEY
07599	LECT-DISC	F	2-4	W F	389	EDUC	BURNETT, BROUDY

HP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS.
*1/2 OR 1 UNIT

07602	CONF		ARR	

HP ED 483 METHODS IN COMPARATIVE EDUCATION.
PREREQUISITE--ANTH. 373 OR SOC. 300, HP. ED. 303,
OR CONSENT OF INSTRUCTOR.
1 UNIT

07611	CONF		ARR	YATES

HP ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
PREREQUISITE--HP. ED. 483. OPEN ONLY TO PERSONS WHO HAVE
COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF
PH. D. OR ED. D.
1 TO 2 UNITS
*SECTION A TOPIC--HISTORY OF EDUCATION.
*SECTION B TOPIC--PHILOSOPHY OF EDUCATION.
*SECTION C TOPIC--COMPARATIVE EDUCATION.
*SECTION D TOPIC--SOCIAL FOUNDATIONS OF EDUCATION.

07629	CONF	*A	ARR
07637	CONF	*B	ARR
07645	CONF	*C	ARR
07653	CONF	*D	ARR

HP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

07661	CONF		ARR

HP ED 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS

07670	CONF		ARR

HOME ECONOMICS

DEPARTMENT OFFICE 260 BEV HALL

NOTE--HOME ECONOMICS COURSES DESIGNED PARTICULARLY FOR NON-MAJOR STUDENTS AND NOT FULFILLING THE REQUIREMENTS FOR A MAJOR IN HOME ECONOMICS ARE HOME ECON. 120, 125, 193, 196, AND 271.

OTHER HOME ECONOMICS COURSES ARE ALSO OPEN TO NON-MAJORS WHO HAVE THE PREREQUISITES LISTED FOR THE COURSE AND THE CONSENT OF THE INSTRUCTOR. STUDENTS ARE REFERRED PARTICULARLY TO H.EC. 105, 132, 133, 160, 171, 182, 183, 184, 202, 210, 260, 263, 270, 285, 286, AND 305.

COURSES FOR UNDERGRADUATES

```
H EC  132     FOODS AND NUTRITION.
        PREREQUISITE--CREDIT OR REGISTRATION IN CHEM. 101 OR 102, OR 111.
        3 HOURS
      07688       LAB-DISC              8-10      TU TH      358  BEV HALL        SCHAFFNER
                                        3-5      M  W        358  BEV HALL        SCHAFFNER
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
H EC  330     EXPERIMENTAL FOODS.
        PREREQUISITE--H. EC. 231, MCBIO. 100, 101.
        *FOR 1 UNIT TWO ADDITONAL HOURS WILL BE SCHEDULED.
        *3 HOURS, OR 1/2 OR 1 UNIT
      07696       LECT                  1          TU TH      328  BEV HALL        JANSSEN
                  LAB                   2-5        TU TH      362  BEV HALL        JANSSEN
                                        1-4       M  W        362  BEV HALL        JANSSEN

H EC  375     HOME EQUIPMENT.
        PREREQUISITE--H. EC. 171, SIX ADVANCED HOURS IN HOME ECONOMICS
        INCLUDING ONE OF THE FOLLOWING--H. EC. 231, 273, 380, SENIOR
        STANDING, CONSENT OF INSTRUCTOR.
        3 HOURS OR 1/2 UNIT
        SECOND FOUR WEEKS--JULY 17-AUGUST 11.
      07700       LECT                  8        MTUWTHF      166  BEV HALL
                  LAB                   9-11     MTUWTHF      166  BEV HALL

H EC  388     PROBLEMS IN TEXTILES AND CLOTHING.
        PREREQUISITE--H. EC. 286 OR 380, OR MKTG. 211, MINIMUM GRADE
        POINT AVERAGE OF 3.5, SENIOR STANDING IN HOME ECONOMICS, OR CONSENT
        OF INSTRUCTOR.
        3 HOURS, OR 1/2 OR 1 UNIT
      07718       CONF                ARR                                           GALBRAITH
```

COURSES FOR GRADUATES

```
H EC  410     PROBLEMS IN FAMILY LIVING.
        PREREQUISITE--H. EC. 210.
        1 UNIT
        FIRST FOUR WEEKS--JUNE 19-JULY 14.
      07726       LECT                 10-12      TUWTHF      449  BEV HALL

H EC  470     SEMINAR IN FAMILY AND CONSUMPTION ECONOMICS.
              SAME AS AG. EC. 470.
        PREREQUISITE--ECON. 102 OR 108 AND A COURSE IN STATISTICS,
        H. EC. 370, H. EC. 313, OR CONSENT OF INSTRUCTOR.
        1/2 OR 1 UNIT
      07734       DISC                ARR                 154  BEV HALL        DUNSING

H EC  493     ADVANCED STUDIES IN HOME ECONOMICS.
        1/2 OR 1 UNIT
        WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
        *     A--THE CHILD AND THE FAMILY
        *     B--FAMILY AND CONSUMPTION ECONOMICS
        *     C--FOODS
        *     D--NUTRITION
        *     E--TEXTILES AND CLOTHING
      07742       CONF        *A      ARR
      07751       CONF        *B      ARR
      07769       CONF        *C      ARR
      07777       CONF        *D      ARR
      07785       CONF        *E      ARR
```

```
H EC  499     THESIS RESEARCH.
         0 TO 2 UNITS
         WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
         *    A--THE CHILD AND THE FAMILY                    MILLS
         *    B--FAMILY AND CONSUMPTION ECONOMICS            DUNSING
         *    C--FOODS                                       VAN DUYNE
         *    D--NUTRITION                                   SMITH
         *    E--TEXTILES AND CLOTHING                       GALBRAITH
       07793      CONF      *A      ARR
       07807      CONF      *B      ARR
       07815      CONF      *C      ARR
       07823      CONF      *D      ARR
       07831      CONF      *E      ARR
```

HORTICULTURE

DEPARTMENT OFFICE 124 M H

COURSES FOR ADVANCED UNDERGRADUATES

```
HORT  200     SPECIAL PROBLEMS.
         PREREQUISITE--MINIMUM GRADE POINT AVERAGE OF 3.5.  NOT OPEN TO
         STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF INSTRUCTOR AND
         HEAD OF DEPARTMENT.  SPECIFIC APPROVAL OF THE ASSOCIATE DEAN
         REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR A THIRD
         SPECIAL PROBLEMS COURSE.
         3 TO 5 HOURS
         WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
              A--POMOLOGY                          LOTT, SIMONS, TITUS, ZYCH
              B--VEGETABLE CROPS                   ARNOLD, MCCOLLUM, THOMPSON
                                                   VANDEMARK, HOPEN,
                                                   DICKINSON, SPLITTSTOESSER
              C--FLORICULTURE                      BEEVERS, BUTLER,
                                                   CULBERT, FOSLER
                                                   GARTNER, HODGES
                                                   NELSON, MEYERS
              D--FRUIT BREEDING                    BIRKELAND, DAYTON
              E--APICULTURE                        JAYCOX
       07840      CONF              ARR                                    STAFF
```

COURSES FOR GRADUATES

```
HORT  492     SPECIAL TOPICS IN HORTICULTURE.
         PREREQUISITE--TWENTY HOURS OF UNDERGRADUATE WORK IN HORTICULTURE
         AND ALLIED SUBJECTS FOR A MAJOR AND TWELVE HOURS FOR A MINOR.
         1/2 TO 2 UNITS
       07858      CONF              ARR                                    STAFF

HORT  499     THESIS RESEARCH.
         REQUIRED FOR MAJOR IN HORTICULTURE.  PREREQUISITE--TWENTY HOURS OF
         UNDERGRADUATE WORK IN HORTICULTURE AND ALLIED SUBJECTS FOR A MAJOR
         AND TWELVE HOURS FOR A MINOR.
         0 TO 2 UNITS
         WORK MAY BE TAKEN IN THE FOLLOWING SUBJECTS--
              A--FLORICULTURE        BEEVERS, CLUBERT, GARTNER, HODGES,
                                     MEYER, BUTLER
              B--FRUIT BREEDING      BARRETT, BIRKELAND, DAYTON
              C--POMOLOGY            JAYCOX, LOTT, SIMONS, TITUS, ZYCH
              D--VEGETABLE CROPS     ARNOLD, DICKINSON, MCCOLLUM, RHODES,
                                     THOMPSON, VANDEMARK, SPLITTSTOESSER,
                                     HOPEN
       07866      CONF              ARR                                    STAFF
```

HUMANITIES

COURSES FOR UNDERGRADUATES

```
HUMAN 151     THE HUMANITIES IN WESTERN CULTURE, I.
        PREREQUISITE--SOPHOMORE STANDING OR JAMES SCHOLAR FRESHMAN, OR
        FRESHMAN STANDING WITH EXEMPTION FROM RHET. 101.
        4 HOURS
      07874      LECT-DISC            9-11    MTU THF    362  L H            BRANDABUR
```

INDUSTRIAL ADMINISTRATION

```
          DEPARTMENT OFFICE                          350 COM W
```

COURSES FOR ADVANCED UNDERGRADUATES

```
I ADM 200     THE LEGAL ENVIRONMENT OF BUSINESS.
        PREREQUISITE--JUNIOR STANDING, ACCY. 105, ECON 102.
        *CREDIT IS NOT GIVEN FOR I. ADM. 200 IN ADDITION TO I. ADM. 261.
        *3 HOURS
      07882      LECT-DISC  A        8       MTUWTHF    160  COM W          BLACK
                            A        1             F    160  COM W

I ADM 210     PRODUCTION MANAGEMENT AND ORGANIZATION.
        PREREQUISITE--JUNIOR STANDING, ECON. 172 OR EQUIVALENT.
        4 HOURS
      07891      LECT-DISC  E        1-240   MTUWTH     160  COM W

I ADM 211     PRODUCTION MANAGEMENT I.
        PREREQUISITE--I. ADM. 210.
        3 HOURS
      07904      LECT-DISC  D       11       MTUWTHF    160  COM W
                            D        3            TH    160  COM W

I ADM 213     PRODUCTION MANAGEMENT II.
        PREREQUISITE--I. ADM. 211, CREDIT OR REGISTRATION IN ECON. 374.
        3 HOURS
      07912      LECT-DISC  C       10       MTUWTHF    160  COM W
                            C        3             F    160  COM W

I ADM 294     SENIOR RESEARCH.
        PREREQUISITE--CUMULATIVE GRADE POINT AVERAGE OF 4.0 OR HONORS IN
        THE JUNIOR YEAR OR CONSENT OF INSTRUCTOR.  SENIOR STANDING.
        2 TO 4 HOURS
      07921      CONF               ARR                350  COM W
```

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
I ADM 301     THE LAW OF SECURITY TRANSACTIONS AND BANKING.
        PREREQUISITE--I. ADM. 200, SENIOR STANDING.
        3 HOURS, OR 3/4 OR 1 UNIT
      07939      LECT-DISC  B        9       MTUWTHF    160  COM W          BLACK
                            B        2             F    160  COM W

I ADM 321     INDUSTRIAL SOCIAL SYSTEMS, I.
              SAME AS L I R 321.
        PREREQUISITE--I. ADM. 210--PSYCH. 100--PSYCH. 255 OR
        CONSENT OF INSTRUCTOR.
        3 HOURS, OR 1/2 TO 1 UNIT
      07947      LECT-DISC  B        9       MTUWTHF    245  COM W
                            B        1            TH    245  COM W
```

I ADM 351 PERSONNEL ADMINISTRATION.
PREREQUISITE--I. ADM. 323, ECON. 173, AND ECON. 240.
*CREDIT IS NOT GIVEN FOR BOTH I. ADM. 351 AND PSYCH. 145 OR 245
OR FOR BOTH I. ADM. 351 AND I. ADM. 448 OR 449.
*3 HOURS, OR 1/2 TO 1 UNIT

07955	LECT-DISC	D	11	MTUWTHF	245	COM W
		D	1	F	245	COM W

COURSES FOR GRADUATES

I ADM 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS L.I.R. 448.
PREREQUISITE--I. ADM. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

07963	LECT-DISC	E	1-3	M TH	36	COM W

I ADM 491 SEMINAR IN SPECIAL TOPICS.
PREREQUISITE--GRADUATE STANDING AND CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT

07971	CONF	ARR	350	COM W

I ADM 499 THESIS RESEARCH.
1 UNIT

07980	CONF	ARR	350	COM W

INDUSTRIAL ENGINEERING

DEPARTMENT OFFICE 144 M E B

COURSES FOR GRADUATES

I E 458 LABORATORY INVESTIGATIONS IN INDUSTRIAL ENGINEERING.
1/2 TO 1 1/2 UNITS

07998	CONF	ARR	STAFF

ITALIAN

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN ITALIAN, EXCLUDING ITALIAN 101 AND 102, AND INCLUDING AT LEAST FIVE HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. LINGUISTICS 300 AND ITALIAN 291 AND 292 ARE ACCEPTABLE. ITALIAN 291 AND 292 FOR MAJORS CAN BE ARRANGED FOR ADVANCED GROUP CREDIT.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--EDUCATION, ENGLISH, EXCLUDING RHET. 101 AND 102, FRENCH, GERMAN, GREEK, HISTORY, LATIN, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, RUSSIAN, AND SPANISH.

COURSES FOR GRADUATES

ITAL 491 SPECIAL TOPICS IN ITALIAN.
1/2 OR 1 UNIT

08004	CONF	ARR	STAFF

ITAL 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS

08012	CONF	ARR	STAFF

JOURNALISM

DEPARTMENT OFFICE 120 A G H

COURSES FOR ADVANCED UNDERGRADUATES

```
JOURN 291     SPECIAL PROBLEMS.
         PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
         2 OR 3 HOURS
      08021      CONF              ARR                    120A G H            JENSEN
                                   ARR                     44  G H            SCHACHT
```

COURSES FOR GRADUATES

```
JOURN 470     COMMUNICATIONS AND POPULAR CULTURE.
              SAME AS COMM. 470.
         1 UNIT
      08039      LECT-DISC  N       10-12     TU TH     123  G H            SCHACHT

JOURN 490     SPECIAL TOPICS IN JOURNALISM.
         PREREQUISITE--CONSENT OF HEAD OF DEPARTMENT.
         1/2 OR 1 UNIT
      08047      CONF              ARR                    120A G H            JENSEN

JOURN 499     THESIS RESEARCH.
         PREREQUISITE--GRADUATE STANDING IN JOURNALISM.
         1 TO 2 UNITS
      08055      CONF              ARR                    120A G H            JENSEN
```

KASHMIRI

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES

```
KASHM 207     INTRODUCTION TO KASHMIRI.
         6 HOURS
         MEETS JUNE 20 THROUGH AUGUST 25.
      08063      LECT-DISC         ARR                                          KACHRU
```

LABOR AND INDUSTRIAL RELATIONS

DEPARTMENT OFFICE 504 E ARMORY, C.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

```
L I R 321     INDUSTRIAL SOCIAL SYSTEMS, I.
              SAME AS I. ADM. 321.
         PREREQUISITE--I. ADM. 210--PSYCH. 100--PSYCH 255 OR
         CONSENT OF INSTRUCTOR.
         3 HOURS, OR 1/2 TO 1 UNIT
      08071      LECT-DISC  B        9       MTUWTHF    245  COM W
                            B        1           TH     245  COM W
```

COURSES FOR GRADUATES

L I R 448 PROBLEMS OF PERSONNEL MANAGEMENT.
SAME AS I. ADM. 448.
PREREQUISITE--I. ADM. 248 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT
08080 LECT-DISC E 1-3 M TH 36 COM W

L I R 490 INDIVIDUAL TOPICS.
0 TO 2 UNITS
08098 CONF ARR STAFF

L I R 499 THESIS RESEARCH.
0 TO 4 UNITS
08101 CONF ARR STAFF

LANDSCAPE ARCHITECTURE

DEPARTMENT OFFICE 205 M H

COURSES FOR GRADUATES

L A 436 ADVANCED LANDSCAPE DESIGN.
PREREQUISITE--BACHELORS DEGREE IN LANDSCAPE ARCHITECTURE.
1 TO 2 UNITS
08110 LAB ARR 1203 W CALIF STAFF

L A 499 THESIS RESEARCH.
1/2 TO 2 UNITS
08128 CONF ARR STAFF

LATIN

DEPARTMENT OFFICE 361 L H

MAJOR--TWENTY HOURS, EXCLUDING LATIN 101, 102, AND 103, AND INCLUDING SIX HOURS IN TRANSLATION COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES. IN ADDITION, CLASSICAL CIVILIZATION 301-302 IS STRONGLY RECOMMENDED AS AN ELECTIVE. SEE ALSO THE SPECIALIZED CURRICULUM PREPARATORY TO THE TEACHING OF LATIN.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH LITERATURE, FOREIGN LANGUAGE, GREEK BEING ESPECIALLY RECOMMENDED, HISTORY, LIBRARY SCIENCE, AND PHILOSOPHY.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LAT 391 READINGS IN LATIN LITERATURE.
PREREQUISITE--THREE YEARS OF COLLEGE LATIN OR EQUIVALENT, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOURS.
*3 HOURS OR 3/4 UNIT
08136 LECT-DISC A 11-1 M W F 362 L H NADUMIDES

LAT 416 VERGIL.
1 UNIT
08144 LECT-DISC 9-11 TU TH 409 LIB BATEMAN

LAT 499 THESIS RESEARCH.
0 TO 2 UNITS
08152 CONF ARR 360 L H STAFF

LATIN AMERICAN STUDIES PROGRAM

DEPARTMENT OFFICE ROOM 316 1207 W OREGON

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

STUDENTS MAY ELECT THE LATIN AMERICAN STUDIES PROGRAM AS EITHER A MAJOR OR A MINOR. IN BOTH CASES STUDENTS FOLLOW THE SAME PROGRAM. STUDENTS WHO ELECT LATIN AMERICAN STUDIES AS A MAJOR OR MINOR SHALL BE REQUIRED TO--

1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE SCIENCES AND LETTERS CURRICULUM.

2-COMPLETE SIX SEMESTERS OR EQUIVALENT OF COLLEGE SPANISH OR PORTUGUESE. IF A STUDENT WISHES TO TAKE BOTH SPANISH AND PORTUGUESE HE MAY TAKE TWO YEARS OF EACH TO SATISFY THIS REQUIREMENT IN THE CASE OF WELL-QUALIFIED STUDENTS THE LANGUAGE REQUIREMENT MAY BE MODIFIED.

3-COMPLETE AT LEAST TWENTY SEMESTER HOURS FROM THE COURSES LISTED BELOW, INCLUDING SOC. S. 101 AND/OR 102 AND SOC. S. 301, CHOSEN FROM AMONG FOUR DEPARTMENTS. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE LATIN AMERICAN STUDIES PROGRAM MAY NOT BE INCLUDED WITHIN THIS TWENTY HOURS.

ANTH. 332, 350, 352, 361, 380
ART 318

ECON. 352
GEOG. 231, 332
HIST. 375, 376, 377

PHIL. 319
POL. S. 342, 343.
PORT. 301, 303, 304, 305, 306
SOC. S. 101, 102, 301
SOC. 373
SPAN. 222, 307, 308, 332

MINORS--STUDENTS WHO MAJOR IN LATIN AMERICAN STUDIES MAY ELECT MINORS AS FOLLOWS--TWENTY HOURS, EXCLUDING COURSES TAKEN IN FRESHMAN YEAR, IN ANY ONE OF THE FOLLOWING SUBJECTS--AGRICULTURAL ECONOMICS, ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, HISTORY OF ART, LINGUISTICS, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH, SOCIAL WORK, AND SOCIOLOGY. MAJORS IN LATIN AMERICAN STUDIES MAY NOT OFFER A SPLIT MINOR.

GRADUATE MINOR IN LATIN AMERICAN STUDIES

CANDIDATES FOR THE MASTERS DEGREE MUST ELECT A MINIMUM OF TWO UNITS FOR A MINOR IN THIS PROGRAM. DOCTORAL CANDIDATES WHO ELECT LATIN AMERICAN STUDIES AS A SOLE MINOR MUST EARN A MINIMUM OF FOUR UNITS OF CREDIT IN APPROVED COURSES, FOR A SPLIT MINOR, AT LEAST TWO UNITS OF CREDIT MUST BE EARNED. THE COURSES FOR ALL GRADUATE MINORS IN LATIN AMERICAN STUDIES MUST BE TAKEN IN AT LEAST TWO DEPARTMENTS. COURSES IN THE FOLLOWING LIST MAY BE INCLUDED IN THE GRADUATE MINOR.

AG. EC. 401
AGRON. 429
ANTH. 350, 352, 361, 380, 490
ART 318, 491
BOT. 300
ECON. 352, 451, 490
GEOG. 332, 495
HIST. 375, 376, 377, 461
PHIL. 319, 483
POL. S. 342, 343, 441, 442, 493
PORT. 301, 303, 304, 305, 306, 491
SOC. S. 301
SOC. 373, 490
SPAN. 307, 308, 431, 432, 433 434, 435, 436, 437, 438.

STUDENTS IN OTHER COLLEGES

STUDENTS IN TECHNICAL AND PROFESSIONAL COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO SEEK KNOWLEDGE OF LATIN AMERICAN AFFAIRS, CULTURE, AND LANGUAGES ARE INVITED TO CONSULT WITH MEMBERS OF THE TEACHING STAFF OF THE LATIN AMERICAN STUDIES PROGRAM, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH A PROGRAM MAY OFTEN BE ADOPTED AS A SPECIAL MINOR UNDER EXISTING REGULATIONS IF THE STUDENT SO DESIRES. IT IS RECOGNIZED THAT THE NUMBER OF ELECTIVE HOURS AVAILABLE FOR SUCH SPECIAL AREA STUDIES VARIES AMONG MANY OF THE EIGHT AND TEN PROGRAMS IN THE UNIVERSITY, BUT MOST STUDENTS WISHING TO INCREASE THEIR PROFICIENCY IN LATIN AMERICAN AFFAIRS CAN DO SO WITHOUT EXCESSIVE CROWDING OF SCHEDULES. THESE COURSES ARE OF PARTICULAR VALUE TO STUDENTS WHO INTEND TO CARRY ON TECHNICAL OR PROFESSIONAL WORK IN THE LATIN AMERICAN AREA FOR THE GOVERNMENT, PRIVATE BUSINESS, PUBLICATIONS, OR RELIGIOUS ORGANIZATIONS.

LAW

DEPARTMENT OFFICE 209 LAW

FIRST TERM--JUNE 12-JULY 19, 1967

SECOND TERM--JULY 20-AUGUST 26, 1967

COURSES FOR ADVANCED LAW STUDENTS

LAW 320 BUSINESS ASSOCIATIONS.
2 1/2 HOURS OR 1 UNIT
LATTY & FRAMPTON, BASIC BUSINESS ASSOCIATIONS, 1963 ED.
SECOND TERM.
08187 LECT-DISC A 1050-1205 MTUWTHF A LAW FRAMPTON

LAW 325 PLEADING.
2 1/2 HOURS OR 1 UNIT
CLEARY, CASES ON PLEADING, 2ND ED.
FIRST TERM.
08195 LECT-DISC A 925-1040 MTUWTHF A LAW STONE

LAW 326 EVIDENCE.
2 1/2 HOURS OR 1 UNIT
MCCORMICK, CASES ON EVIDENCE, 4TH ED.
SECOND TERM.
08209 LECT-DISC A 925-1040 MTUWTHF A LAW CLEARY

LAW 330 RESTITUTION.
2 1/2 HOURS OR 1 UNIT
WADE, CASES ON RESTITUTION, 2ND ED.
FIRST TERM.
08217 LECT-DISC A 8-915 MTUWTHF A LAW DAVIS

LAW 333 PERSONS.
2 1/2 HOURS OR 1/2 UNIT
CASEBOOK TO BE ANNOUNCED.
SECOND TERM.
08225 LECT-DISC A 115-230 MTUWTHF A LAW KRAUSE

LAW 339 CONFLICT OF LAWS.
2 1/2 HOURS OR 1 UNIT
CHEATHAM, GRISWOLD, REESE & ROSENBERG, CASES ON CONFLICT OF LAWS, 5TH ED.
SECOND TERM.
08233 LECT-DISC A 925-1040 MTUWTHF B LAW SCOLES

LAW 340 LOCAL GOVERNMENT LAW.
2 1/2 HOURS OR 1 UNIT
MANDELKER, MANAGING OUR URBAN ENVIRONMENT.
FIRST TERM.
08241 LECT-DISC A 115-230 MTUWTHF A LAW BAUM

LAW 342 MORTGAGES.
2 1/2 HOURS OR 1 UNIT
CASEBOOK TO BE ANNOUNCED.
FIRST TERM.
08250 LECT-DISC A 925-1040 MTUWTHF B LAW FINDLEY

LAW 344 CREDITORS RIGHTS.
2 1/2 HOURS OR 1 UNIT
HANNA & MACLACHLAN, CASES ON CREDITORS RIGHTS, 5TH ED., AND HANNA & MACLACHLAN, BANKRUPTCY ACT OF 1898 AS AMENDED WITH ANNOTATIONS, 8TH ED.
SECOND TERM.
08268 LECT-DISC A 1050-1205 MTUWTHF B LAW BOWMAN

LAW 345 CIVIL AND POLITICAL RIGHTS.
2 1/2 HOURS OR 1/2 UNIT
LOCKHART, KAMISAR, & CHOPER, CASES ON CONSTITUTIONAL RIGHTS AND LIBERTIES, WITH 1965 SUPPLEMENT.
FIRST TERM.
08276 LECT-DISC A 240-355 MTUWTHF A LAW MORGAN

LAW 351 JURISPRUDENCE.
2 1/2 HOURS OR 1 UNIT
CASEBOOK TO BE ANNOUNCED.
FIRST TERM.
08284 LECT-DISC A 1050-1205 MTUWTHF E LAW HAY

LAW 357 LEGAL ACCOUNTING.
2 1/2 HOURS
HERWITZ & TRAUTMAN, AMORY & HARDEES MATERIALS ON ACCOUNTING, 3D ED.
SECOND TERM.
08292 LECT-DISC A 8-915 MTUWTHF E LAW YOUNG

LAW 358 MODERN SOCIAL LEGISLATION.
2 1/2 HOURS OR 1 UNIT
KEETON & OCONNELL BASIC PROTECTION FOR THE TRAFFIC VICTIM AND BLUM & KALVEN, PUBLIC LAW PERSPECTIVE ON A PRIVATE LAW PROBLEM AUTO COMPENSATION PLANS.
FIRST TERM.
08306 LECT-DISC A 1050-1205 MTUWTHF A LAW OCONNELL

LAW 399 RESEARCH ON SPECIAL TOPICS.
1 TO 4 HOURS, OR 1/2 OR 1 UNIT
EITHER OR BOTH TERMS.

08314	CONF	A	ARR	

COURSES FOR GRADUATES

LAW 499 THESIS RESEARCH.
1/2 TO 3 UNITS
EITHER OR BOTH TERMS.

08322	CONF	A	ARR	

LIBRARY SCIENCE

DEPARTMENT OFFICE 331 LIB

COURSES FOR ADVANCED UNDERGRADUATES

LIB S 201 INTRODUCTION TO REFERENCE SERVICE.
PREREQUISITE--60 HOURS OF ACADEMIC WORK.
3 HOURS

08331	LECT	A	8	MTUWTHF	314	LIB	JONES
		A	10	F	66	LIB	JONES
08349	LECT	B	1230-2	M W	227	LIB	JONES
		B	1	TU THF	227	LIB	JONES
08357	LECT	C	11-1230	M W	314	LIB	ALLEN
		C	11	TU THF	314	LIB	ALLEN

LIB S 204 DEVELOPMENT AND OPERATION OF LIBRARIES.
PREREQUISITE--60 HOURS OF ACADEMIC WORK.
2 HOURS
*STUDENTS WHO REGISTER FOR LECTURE A MUST ALSO REGISTER FOR LAB A, B, OR C. STUDENTS WHO REGISTER FOR LECTURE B MUST ALSO REGISTER FOR LAB D OR E.

08365	LECT	*A	2-4	M TH	66	LIB
08390	LECT	*B	2-4	TU F	66	LIB
14700	LAB	*A	3-5	TU	309	LIB
08373	LAB	*B	3-5	W	309	LIB
08381	LAB	*C	3-5	M	309	LIB
08403	LAB	*D	3-5	TH	309	LIB
08411	LAB	*E	3-5	F	309	LIB

LIB S 255 ORGANIZATION OF LIBRARY MATERIALS.
PREREQUISITE--90 HOURS OF ACADEMIC WORK.
3 HOURS

08420	LECT	A	1230-2	M W	309	LIB	FIELD
		A	1	TU THF	309	LIB	FIELD
08438	LECT	B	8	MTUWTHF	227	LIB	SATTERFIELD
		B	10	W	314	LIB	SATTERFIELD
08446	LECT	C	9	MTUWTH	314	LIB	FIELD
		C	9-11	F	314	LIB	FIELD

LIB S 258 SELECTION OF LIBRARY MATERIALS.
PREREQUISITE--60 HOURS OF ACADEMIC WORK.
2 HOURS

08454	LECT	A	10	MTUWTH	215	G H	BONE
08462	LECT	B	9	MTUWTH	215	G H	BOB
08471	LECT	C	11	MTUWTH	215	G H	BONE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LIB S 301 LITERATURE OF THE HUMANITIES AND SOCIAL SCIENCES.
PREREQUISITE--SENIOR STANDING.
3 HOURS OR 1 UNIT

08489	LECT		8	MTUWTHF	215	G H	BOB
			1	F	215	G H	BOB

LIB S 303 LIBRARY MATERIALS FOR CHILDREN.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

08497	LECT	1	MTU THF	66	LIB	LATHROPE
		1-3	W	66	LIB	LATHROPE

LIB S 304 LIBRARY MATERIALS FOR YOUNG ADULTS.
PREREQUISITE--JUNIOR STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

08501	LECT	10-12	M W F	227	LIB	WALKER

LIB S 307 LIBRARY MATERIALS AND SERVICES FOR CHILDREN AND YOUNG ADULTS.
*CREDIT WILL NOT BE GIVEN FOR LIB. S. 307 AND EITHER 303, 304, 309, OR 406.
3 HOURS OR 1 UNIT

08519	LECT	2-4	M W F	217	G H	WALKER

LIB S 309 STORYTELLING.
3 HOURS, OR 1/2 OR 1 UNIT

08527	LECT	4	MTUWTH	227	LIB	LATHROPE
		3-5	F	227	LIB	LATHROPE

COURSES FOR GRADUATES

LIB S 405 LIBRARY ADMINISTRATION.
1 UNIT

08535	LECT	10-12	M W	66	LIB	GOLDSTEIN

LIB S 407 CATALOGING AND CLASSIFICATION, I.
1 UNIT

08543	LECT	1	MTUWTH	314	LIB	SATTERFIELD

LIB S 409 COMMUNICATION ROLES AND RESPONSIBILITIES OF LIBRARIES.
1 UNIT

08551	LECT	10-12	TU TH	66	LIB	GOLDSTEIN

LIB S 411 REFERENCE SERVICE IN THE HUMANITIES AND SOCIAL SCIENCES.
1 UNIT

08560	LECT	9	MTUWTHF	227	LIB	ALLEN

LIB S 427 RESOURCES OF AMERICAN RESEARCH LIBRARIES.
1 UNIT

08578	LECT	2-4	TU TH	314	LIB	STEVENS

LIB S 429 INFORMATION STORAGE AND RETRIEVAL.
PREREQUISITE--LIB. S. 405 AND CONSENT OF INSTRUCTOR.
1 UNIT

08586	LECT	2-4	M W F	215	G H	CARROLL

LIB S 431 BOOKS AND LIBRARIES IN THE ANCIENT AND MEDIEVAL WORLD.
1 UNIT

08594	LECT	2-4	M W	314	LIB	STEVENS

LIB S 433 ADVANCED SUBJECT BIBLIOGRAPHY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 1 UNIT.
*1/2 UNIT

08608	LECT	D	ARR			STENSTROM

LIB S 438 ADMINISTRATION AND USE OF ARCHIVAL MATERIALS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
FIRST FOUR WEEKS.

08616	LECT	8-10	MTUWTHF	66	LIB	

COURSES FOR ADVANCED GRADUATES

LIB S 450 ADVANCED PROBLEMS IN LIBRARIANSHIP.
PREREQUISITE--A FIFTH-YEAR DEGREE IN LIBRARY SCIENCE, CONSENT OF DIRECTOR.
1/2 TO 2 UNITS
STUDENTS REGISTERING FOR LECTURE L DO NOT TAKE A DISCUSSION AND STUDENTS REGISTERING FOR LECTURE M MUST ALSO REGISTER FOR ONE DISCUSSION.
SECTION L--LAST FOUR WEEKS.

08624	LECT	L	8-10	MTU THF	66	LIB	LUBETZKY
08632	LECT	*M	9-12	MTUWTHF	215	D K H	THOMASSEN
08641	DISC	*A	130-330	MTUWTHF	328	LIB	
08659	DISC	*B	130-330	MTUWTHF	215	D K H	
08667	DISC	*C	130-330	MTUWTHF	429	LIB	

LINGUISTICS

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

LING 300 INTRODUCTION TO LINGUISTICS.
SAME AS ANTH. 300.
PREREQUISITE--FULFILLMENT OF THE FOREIGN LANGUAGE REQUIREMENT IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR EQUIVALENT.
3 HOURS OR 1/2 UNIT

08675	LECT-DISC		10-12	M W F	252	ADMIN	LIGHTNER

LING 303 NON-WESTERN LINGUISTIC STRUCTURES.
*MAY BE REPEATED FOR CREDIT UPON CONSENT OF INSTRUCTOR.
*3 HOURS OR 1 UNIT
SECTION A TOPIC--STRUCTURE OF HINDI.

08683	LECT-DISC	A	2	MTUWTHF	154	ADMIN	KACHRU

LING 351 AREA LINGUISTICS.
PREREQUISITE--LING. 300.
3 HOURS OR 1 UNIT

08691	LECT-DISC		9	MTUWTHFS	143	ADMIN	FAIRBANKS

LING 387 THE STRUCTURE OF ENGLISH.
SAME AS ENGL. 387.
3 HOURS OR 3/4 UNIT

08705	LECT-DISC		1-3	M W F	252	ADMIN	ZWICKY

LING 391 HISTORY OF THE HINDI LANGUAGE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

08713	LECT-DISC		1	MTUWTHF	148	ADMIN	FAIRBANKS

LING 392 SEMINAR ON THE PROBLEMS OF TEACHING ENGLISH IN SOUTH ASIA.
SAME AS ENGL. AND RHET. 392.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT

08721	LECT-DISC	B	9	MTUWTHFS	217	G H	ASTON

LING 394 THE PANINIAN TRADITION IN LINGUISTICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

08730	LECT-DISC		1	MTUWTHF	143	ADMIN	STAAL

COURSES FOR GRADUATES

LING 402 LINGUISTIC ANALYSIS, II--PHONOLOGY.
PREREQUISITE--LING. 401 OR CONSENT OF INSTRUCTOR.
1 UNIT

08748	LECT-DISC	3-5	M W F	252	ADMIN	LIGHTNER

LING 416 SEMINAR IN SOUTH ASIAN ENGLISH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

08756	LECT-DISC	ARR	KACHRU

LING 490 SPECIAL TOPICS IN LINGUISTICS.
1/2 TO 2 UNITS

08764	CONF	ARR	STAFF

LING 499 THESIS RESEARCH.
0 TO 2 UNITS

08772	CONF	ARR	STAFF

MANAGEMENT
SEE INDUSTRIAL ADMINISTRATION

MARKETING

DEPARTMENT OFFICE 340 COM W

COURSES FOR ADVANCED UNDERGRADUATES

MKTG 201 PRINCIPLES OF MARKETING.
PREREQUISITE--ECON. 172 OR EQUIVALENT.
*CREDIT IS NOT GIVEN FOR BOTH MKTG. 201 AND 272.
*3 HOURS

08781	LECT-DISC	B	9	MTUWTHF	36	COM W
		B	4	TU	36	COM W

MKTG 206 MARKETING ENVIRONMENT.
PREREQUISITE--MKTG. 201.
3 HOURS

08799	LECT-DISC	D	11	MTUWTHF	170	COM W
		D	12	M	170	COM W

MKTG 294 SENIOR RESEARCH.
PREREQUISITE--CUMULATIVE GRADE POINT AVERAGE OF 4.0 OR HONORS IN THE JUNIOR YEAR OR CONSENT OF INSTRUCTOR. SENIOR STANDING.
2 TO 4 HOURS

08802	CONF	ARR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MARKETING MAJORS WILL NOT RECEIVE GRADUATE CREDIT FOR THESE COURSES

MKTG 337 ADVERTISING AND SALES MANAGEMENT.
PREREQUISITE--MKTG. 201.
*NO GRADUATE CREDIT FOR MARKETING MAJORS.
*3 HOURS OR 1/2 UNIT

08811	LECT-DISC	B	9	MTUWTHF	170	COM W
		B	4	W	170	COM W

MKTG 380 ADVANCED MARKETING MANAGEMENT.
PREREQUISITE--MKTG. 320 AND 337.
*NO GRADUATE CREDIT FOR MARKETING MAJORS.
*3 HOURS OR 1/2 UNIT

08829	LECT-DISC	C	10	MTUWTHF	36	COM W
		C	4	M	36	COM W

MKTG 401 MARKETING PRINCIPLES AND PROBLEMS.
1 UNIT
08837 LECT-DISC 2-4 M TH 170 COM W

MKTG 493 RESEARCH IN SPECIAL FIELDS.
1/4 TO 2 UNITS
08845 CONF ARR

MKTG 499 THESIS RESEARCH.
0 TO 2 UNITS
08853 DISC 4-6 M 170 COM W

MATHEMATICS

DEPARTMENT OFFICE 273 A H

MAJOR IN MATHEMATICS

MAJOR--TWENTY-THREE HOURS IN MATHEMATICS, EXCLUDING COURSES WITH NUMBERS LESS THAN 130, AND INCLUDING THREE COURSES CHOSEN FROM MATH. 317, 318, 327, 328, 332, 333, 347, 348, 353, 354, 387.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ACCOUNTANCY, ASTRONOMY, CHEMISTRY, ECONOMICS, FINANCE, PHILOSOPHY, PHYSICS, PSYCHOLOGY, STATISTICS--MATH. 161, 361, 362, 363, 364, 375, SURVEYING, THEORETICAL AND APPLIED MECHANICS.
DEPARTMENTAL HONORS. ENTERING STUDENTS WITH SUPERIOR MATHEMATICAL ABILITY SHOULD APPLY TO THE DEPARTMENT OF MATHEMATICS, 273 ALTGELD HALL, FOR INFORMATION REGARDING THE HONORS COURSE, MATH. 149. INFORMATION REGARDING REQUIREMENTS FOR GRADUATION WITH DISTINCTION IN MATHEMATICS IS AVAILABLE FROM DR. J. W. PETERS, 267 ALTGELD HALL

NOTE--AN ENTERING STUDENT WITH AN ADEQUATE PREPARATION IN HIGH SCHOOL MATHEMATICS SHOULD ENROLL IN ANALYTIC GEOMETRY, MATH. 122 OR 123, DURING THE FIRST SEMESTER, AND IN CALCULUS, MATH. 132 OR 133, DURING THE SECOND SEMESTER OF HIS FRESHMAN YEAR. ADMISSION TO ANALYTIC GEOMETRY NORMALLY REQUIRES A PASSING GRADE ON THE MATHEMATICS PLACEMENT TEST. A STUDENT INELIGIBLE FOR ANALYTIC GEOMETRY SHOULD ENROLL IN ALGEBRA, MATH. 111 OR 112, AND TRIGONOMETRY, MATH. 114, DURING HIS FIRST SEMESTER.

UNDERGRADUATE STUDENTS INTENDING TO TAKE ADVANCED WORK OR A MAJOR IN MATHEMATICS SHOULD COMPLETE THE SECOND SEMESTER OF CALCULUS, MATH. 142 OR 143, AS EARLY AS POSSIBLE. OF THE VARIOUS COURSES OFFERED AT THE 300 LEVEL, THE INTRODUCTORY COURSES IN ALGEBRA, 317, 318, IN GEOMETRY, 327, 328, IN TOPOLOGY, 332, 333, AND IN ANALYSIS, 347, 348 ARE BASIC FOR MORE ADVANCED WORK IN MATHEMATICS. MANY OF THE OTHER 300 LEVEL COURSES ARE DESIGNED TO SERVE STUDENTS WHO ANTICIPATE A RELATIVELY EARLY TERMINATION OF THEIR COURSE WORK IN MATHEMATICS, THESE STUDENTS MIGHT PREFER THE COURSES THAT RELATE INTERMEDIATE MATHEMATICS TO THEIR SPECIALIZED AREAS OF INTEREST. STUDENTS PREPARING TO TEACH HIGH SCHOOL OR COLLEGE MATHEMATICS, OR THOSE INTERESTED IN MATHEMATICS AS A CAREER SHOULD CONSULT WITH DR. J. W. PETERS, 267 ALTGELD HALL, CONCERNING THEIR PROGRAM AT THE EARLIEST POSSIBLE MOMENT AFTER ENTERING THE UNIVERSITY.

MAJOR IN STATISTICS

MAJOR--TWELVE HOURS BEYOND CALCULUS INCLUDING MATH. 315, 347, 363, AND THREE OTHER HOURS OF 300 COURSES IN STATISTICS IN THE DEPARTMENT OF MATHEMATICS.

MINORS--TWENTY HOURS IN ONE SUBJECT APPROVED BY THE DEPARTMENT OF MATHEMATICS. OF THESE TWENTY HOURS NOT MORE THAN NINE MAY BE IN STATISTICAL METHODS, AND MATH. 161 MAY BE TAKEN AS THREE OF THESE HOURS. THE COURSES NOT EMPHASIZING STATISTICAL METHODS SHOULD BE CHOSEN SO THAT COURSES ON THE 400 LEVEL CAN BE TAKEN IF THE STUDENT ENTERS THE GRADUATE COLLEGE.

MAJOR IN ACTUARIAL SCIENCE

MAJOR--ONE YEAR OF CALCULUS AND AT LEAST FIVE COURSES CHOSEN FROM THE FOLLOWING--MATH. 195, 311, 312, 362, 363, 371, 372,

MINORS--TWENTY HOURS CHOSEN FROM THE FOLLOWING--FIN. 258, 259, 260, 262, 270, 360, 363, 370.

NOTE--STUDENTS ARE URGED TO ELECT ACCY. 201 AND I. ADM. 261 IN THEIR JUNIOR YEAR.

MAJOR IN MATHEMATICS AND COMPUTER SCIENCE

MAJOR--MATH. 123, 132, 142--OR 133, 143--341, 342, 317, 318 347, 348--OR 361.

FIRST MINOR--MATH. 195, 387, AND TWO COURSES SELECTED FROM MATH. 294, 295, 395, 397-ONE OF WHICH MUST BE EITHER MATH. 295 OR 395.

SECOND MINOR--AT LEAST EIGHT HOURS IN A SUBJECT APPROVED BY THE DEPARTMENT.

NOTE--IT IS RECOMMENDED THAT THE ABOVE COURSES BE TAKEN IN THE FOLLOWING SEQUENCE--
FRESHMAN YEAR--FIRST SEMESTER, MATH. 123--SECOND SEMESTER, MATH. 132 OR 133.
SOPHOMORE YEAR--FIRST SEMESTER, MATH. 142 OR 143--SECOND SEMESTER, MATH. 195 AND 341.
JUNIOR YEAR--FIRST SEMESTER, MATH. 294, 342, AND 361--SECOND SEMESTER, MATH. 295 AND 317.
SENIOR YEAR--FIRST SEMESTER, MATH. 318 AND 343--SECOND SEMESTER, MATH. 347 AND 387.

COURSES FOR UNDERGRADUATES

MATH 111 ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1 UNIT, PLANE GEOMETRY, 1 UNIT. STUDENTS HAVING 1-1/2 OR MORE UNITS OF HIGH SCHOOL ALGEBRA MAY NOT TAKE THIS COURSE UNLESS THEY HAVE THE APPROVAL OF THEIR COLLEGE OFFICE.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 111 AND 112.
*5 HOURS

08861	LECT-DISC	A1	8-10	MTUWTHF	345	A H

MATH 112 COLLEGE ALGEBRA.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, PLANE GEOMETRY, 1 UNIT.
*CREDIT IS NOT GIVEN FOR BOTH MATH. 111 AND 112.
*3 HOURS

08870	LECT-DISC	B1	9	MTUWTHFS	347	A H

MATH 114 PLANE TRIGONOMETRY.
PREREQUISITE--ENTRANCE ALGEBRA, 1-1/2 UNITS, OR REGISTRATION IN MATH. 111, PLANE GEOMETRY, 1 UNIT.
2 HOURS

08888	LECT-DISC	A1	8	TUWTHF	341	A	H
08896	LECT-DISC	D1	11	TUWTHF	145	A	H

MATH 123 ANALYTIC GEOMETRY.
PREREQUISITE--MATH. 111 OR 112, AND 114.
5 HOURS

08900	LECT-DISC	A1	8-10	MTUWTHF	145	A	H
08918	LECT-DISC	B1	9-11	MTUWTHF	147	A	H
08926	LECT-DISC	C1	10-12	MTUWTHF	441	A	H

MATH 124 INTRODUCTORY ANALYSIS FOR SOCIAL SCIENTISTS, I.
PREREQUISITE--MATH. 111 OR 112.
*CREDIT IS NOT GRANTED FOR MATH. 124-134 IN ADDITION TO MATH. 358-359.
*3 HOURS

08934	LECT-DISC	C1	10	MTUWTHFS	145	A	H

MATH 133 CALCULUS, I.
PREREQUISITE--MATH. 122 OR 123.
3 HOURS

08942	LECT-DISC	A1	8	MTUWTHFS	147	A	H
08951	LECT-DISC	B1	9	MTUWTHFS	441	A	H
08969	LECT-DISC	D1	11	MTUWTHFS	147	A	H

MATH 134 INTRODUCTORY ANALYSIS FOR SOCIAL SCIENTISTS, II.
PREREQUISITE--MATH. 124.
*CREDIT IS NOT GRANTED FOR MATH. 124-134 IN ADDITION TO MATH. 358-359.
*4 HOURS

08977	LECT-DISC	B1	9-1030	MTUWTHF	443	A	H

MATH 142 CALCULUS, II.
PREREQUISITE--MATH. 132.
3 HOURS

08985	LECT-DISC	B1	9	MTUWTHFS	445	A	H
08993	LECT-DISC	C1	10	MTUWTHFS	445	A	H

MATH 143 CALCULUS, II.
PREREQUISITE--MATH. 133.
5 HOURS

09000	LECT-DISC	B1	9-11	MTUWTHF	245	A	H

COURSES FOR ADVANCED UNDERGRADUATES

MATH 202 MATHEMATICS FOR ELEMENTARY TEACHERS, I.
PREREQUISITE--JUNIOR STANDING IN ELEMENTARY EDUCATION.
*NO CREDIT FOR L. A. AND S. STUDENTS.
*5 HOURS

09018	LECT-DISC	C1	10-12	MTUWTHF	347	A	H	F DAY

MATH 291 THESIS AND READING COURSE.
PREREQUISITE--MATH. 347 WITH GRADE OF B OR BETTER, OR CONSENT OF MATHEMATICS HONORS COMMITTEE.
2 HOURS

09026	DISC	ARR

MATH 298 SUMMER PROGRAM IN INDEPENDENT STUDY.
PREREQUISITE--SELECTION BY HONORS COMMITTEE UPON FORMAL APPLICATION FROM STUDENT.
6 HOURS

09034	DISC	ARR

```
MATH  300     THE THEORY OF SETS AND THE REAL NUMBER SYSTEM.
        PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
        3 HOURS OR 1 UNIT
        *SECTION D1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09042      LECT-DISC  C1       10        MTUWTHF    341  A H            LU
                            C1        3            TH     341  A H            LU
      09051      LECT-DISC *D1    1055-1155  MTUWTHFS   343  A H


MATH  302     TOPICS IN GEOMETRY.
        PREREQUISITE--ONE YEAR OF CALCULUS OR CONSENT OF INSTRUCTOR.
        3 HOURS OR 1 UNIT
      09069      LECT-DISC  A1        8        MTUWTHF    156  ADMIN          PETERS
                            A1        3         TU        156  ADMIN          PETERS


MATH  306     SELECTED MATHEMATICAL TOPICS FOR SECONDARY SCHOOL TEACHERS, I.
        PREREQUISITE--ONE YEAR OF SECONDARY SCHOOL TEACHING IN MATHEMATICS
        OR CONSENT OF INSTRUCTOR.
        3 HOURS, OR 1/2 OR 1 UNIT
        *SECTION B1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09077      LECT-DISC *B1     855-955   MTUWTHFS   343  A H


MATH  315     LINEAR TRANSFORMATIONS AND MATRICES.
        PREREQUISITE--ONE YEAR OF CALCULUS.
        3 HOURS OR 1 UNIT
        STUDENTS MUST ENROLL FOR THE LECTURE AND ONE DISCUSSION SECTION.
      09085      LECT       D1       11        MTUWTH     314  A H            P MONTAGUE
      09093      DISC       F1        2        M   TH     247  A H
      09107      DISC       F2        2        M   TH     257  A H
      09115      DISC       F3        2        M   TH     343  A H


MATH  317     INTRODUCTION TO HIGHER ALGEBRA, I.
        PREREQUISITE--ONE YEAR OF CALCULUS.
        3 HOURS OR 1 UNIT
        *ONE ADDITIONAL HOUR TO BE ARRANGED.
        SECTION C1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09123      LECT-DISC  C1       10        MTUWTH     241  A H
      09131      LECT-DISC  E1       *1        MTUWTHF    156  ADMIN          SHARPE


MATH  318     INTRODUCTION TO HIGHER ALGEBRA, II.
        PREREQUISITE--MATH. 317.
        3 HOURS OR 1 UNIT
      09140      LECT-DISC  D1       11        MTUWTHF    247  A H            RALLEY
                            D1        3        M          247  A H            RALLEY


MATH  332     INTRODUCTION TO SET THEORY AND TOPOLOGY.
        PREREQUISITE--CREDIT OR REGISTRATION IN MATH. 347.
        3 HOURS OR 1 UNIT
      09158      LECT-DISC  C1       10        MTUWTHF    345  A H            LEHNER
                            C1        3            TH     345  A H            LEHNER


MATH  343     ADVANCED CALCULUS.
        PREREQUISITE--ONE YEAR OF CALCULUS.
        3 HOURS OR 1 UNIT
        *ONE ADDITIONAL HOUR TO BE ARRANGED.
      09166      LECT-DISC  B1       *9        MTUWTHF    314  A H            LANIER


MATH  345     DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS.
        PREREQUISITE--ONE YEAR OF CALCULUS.
        *CREDIT IS NOT GIVEN FOR BOTH MATH. 345 AND MATH. 349.
        *3 HOURS OR 1 UNIT
        *ONE ADDITIONAL HOUR TO BE ARRANGED.
      09174      LECT-DISC  C1       *10       MTUWTHF    314  A H            FERGUSON
```

```
MATH  346     COMPLEX VARIABLES AND APPLICATIONS.
        PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
        *CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND MATH. 348.
        *3 HOURS OR 1 UNIT
        *ONE ADDITIONAL HOUR TO BE ARRANGED.
      09182      LECT-DISC  A1      *8       MTUWTHF    314  A H          BLAIR


MATH  347     INTRODUCTION TO HIGHER ANALYSIS--REAL VARIABLES.
        PREREQUISITE--MATH. 343 OR CONSENT OF INSTRUCTOR.
        3 HOURS OR 1 UNIT
        *SECTION D1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09191      LECT-DISC  A1       8       MTUWTHF    247  A H          COOPER
                            A1       3        TU        247  A H          COOPER
      09204      LECT-DISC *D1      11       MTUWTH     345  A H


MATH  348     INTRODUCTION TO HIGHER ANALYSIS--COMPLEX VARIABLES.
        PREREQUISITE--MATH. 347.
        *CREDIT IS NOT GIVEN FOR BOTH MATH. 346 AND 348.
        *3 HOURS OR 1 UNIT
        *SECTION D1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09212      LECT-DISC  B1       9       MTUWTHF    341  A H          DOWSON
                            B1       3          W       341  A H          DOWSON
      09221      LECT-DISC *D1      11       MTUWTH     156  ADMIN


MATH  350     TOPICS IN PURE MATHEMATICS.
        PREREQUISITE--CONSENT OF INSTRUCTOR.
        3 HOURS OR 1 UNIT
        *SECTION E1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09239      LECT-DISC *E1       1       MTUWTHF    314  A H


MATH  353     ELEMENTARY THEORY OF NUMBERS, I.
        PREREQUISITE--ONE YEAR OF CALCULUS.
        3 HOURS OR 1 UNIT
      09247      LECT-DISC  C1      10       MTUWTHF    257  A H          MCDONAGH
                            C1       3           TH     257  A H          MCDONAGH


MATH  363     ADVANCED STATISTICS, I.
        PREREQUISITE--ONE YEAR OF CALCULUS.
        3 HOURS OR 1 UNIT
      09255      LECT-DISC  B1       9       MTUWTHF    257  A H          PATHAK
                            B1       3          W       257  A H          PATHAK


MATH  387     INTRODUCTION TO NUMERICAL ANALYSIS.
              SAME AS C. S. 387.
        PREREQUISITE--MATH. 195 OR C. S. 101, AND A COURSE IN DIFFERENTIAL
        EQUATIONS, OR CONSENT OF INSTRUCTOR.
        3 HOURS OR 1 UNIT
      09263      LECT-DISC  B1       9       MTUWTHF    247  A H          NIEVERGELT
                            B1       3          W       247  A H          NIEVERGELT


MATH  388     MATHEMATICAL METHODS IN ENGINEERING AND SCIENCE.
        PREREQUISITE--MATH. 343.
        3 HOURS OR 1 UNIT
      09271      LECT-DISC  C1      10       MTUWTHF    156  ADMIN        LANGEBARTEL
                            C1       3       M          156  ADMIN        LANGEBARTEL
```

COURSES FOR GRADUATES

```
MATH  401     SECOND COURSE IN ABSTRACT ALGEBRA, I.
        PREREQUISITE--MATH. 317 AND 318.
        1 UNIT
        *SECTION B1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
        JUNE 20-SEPT. 8.
      09298      LECT-DISC *B1       9       MTUWTH     156  ADMIN
      09280      LECT-DISC  D1      11       MTUWTHF    257  A H          DUMIR


MATH  402     SECOND COURSE IN ABSTRACT ALGEBRA, II.
        PREREQUISITE--MATH. 401.
        1 UNIT
      09301      LECT-DISC  D1      11       MTUWTHF    245  A H          ROGGENKAMP
```

MATH 416 ADVANCED TOPICS IN ABSTRACT ALGEBRA.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION *C1 CONSIDERS MODULAR REPRESENTATION OF GROUPS.

09310	LECT-DISC	*C1	10	MTUWTHF	447	A H	AMITSUR

MATH 422 ALGEBRAIC GEOMETRY.
PREREQUISITE--MATH. 328.
1 UNIT

09328	LECT-DISC	D1	11	MTUWTHF	243	A H	REES

MATH 430 ELEMENTARY GEOMETRY FROM A MODERN VIEWPOINT.
PREREQUISITE--ONE YEAR OF EXPERIENCE IN THE TEACHING OF HIGH SCHOOL MATHEMATICS, CONSENT OF INSTRUCTOR.
1 UNIT
*SECTION E1 IS A 12-WEEK COURSE FOR TEACHERS ONLY.
JUNE 20-SEPT. 8.

09336	LECT-DISC	*E1	1	MTUWTH	343	A H	

MATH 435 GENERAL TOPOLOGY.
PREREQUISITE--MATH. 332 OR CONSENT OF INSTRUCTOR.
1 UNIT

09344	LECT-DISC	C1	10	MTUWTHF	243	A H	R ASH

MATH 440 THEORY OF FUNCTIONS OF A COMPLEX VARIABLE, I.
PREREQUISITE--MATH. 348 OR CONSENT OF INSTRUCTOR.
1 UNIT

09352	LECT-DISC	B1	9	MTUWTHF	243	A H	SHERBERT

MATH 441 REAL ANALYSIS, I.
PREREQUISITE--MATH. 347 OR EQUIVALENT.
1 UNIT

09361	LECT-DISC	A1	8	MTUWTHF	243	A H	KAUFMAN

MATH 442 REAL ANALYSIS, II.
PREREQUISITE--MATH. 441.
1 UNIT

09379	LECT-DISC	E1	1	MTUWTHF	241	A H	KRISHNA

MATH 444 PARTIAL DIFFERENTIAL EQUATIONS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

09387	LECT-DISC	A1	8	MTUWTHF	245	A H	SCOTT

MATH 446 HILBERT SPACE.
PREREQUISITE--MATH. 442.
1 UNIT

09395	LECT-DISC	A1	8	MTUWTHF	241	A H	PERESSINI

MATH 455 MATHEMATICAL METHODS OF PHYSICS, I.
PREREQUISITE--MATH. 348.
1 UNIT

09409	LECT-DISC	B1	9	MTUWTHF	241	A H	BELFORD

MATH 490 READING COURSE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS

09417	DISC		ARR

MATH 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 2 UNITS

09425	DISC		ARR

DEPARTMENT OFFICE 144 M E B

COURSES FOR ADVANCED UNDERGRADUATES

M E 224 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 221, OR M E 222, T A M 221, CREDIT OR REGISTRATION IN T A M 223.
3 HOURS

09433	LECT-DISC	P	10-12	MTUWTHFS	336	M E B	LARSON

M E 234 HEAT TREATMENT OF METALS.
PREREQUISITE--T A M 221, CREDIT OR REGISTRATION IN M E 224 AND T A M 223.
3 HOURS

09441	LECT-DISC	P	1	MTUWTH	110	M E B	RAMALINGAM AND SINGER
09441	LAB	P	2-5	TU TH	110	M E B	
		P	2-5	TU TH	114	M E B	

M E 263 APPLICATION OF ENERGY CONCEPTS TO POWER PROCESSES.
PREREQUISITE--M.E. 206 AND 212.
5 HOURS

09450	LECT-DISC	P	7	MTUWTH	204	M E L	STAFF
		P	8-10	F	204	M E L	
	LAB	P	8-10	MTUWTH	204	M E L	
		P	8-10	MTUWTH	101	M E B	
		P	8-10	MTUWTH	M E LAB		

M E 264 HEAT POWER LABORATORY.
PREREQUISITE--M E 212 AND 263.
3 HOURS

09468	LAB	P	8-10	MTUWTHFS	204	M E L	STAFF
		P	8-10	MTUWTHFS	101	M E B	
		P	8-10	MTUWTHFS	M E LAB		

M E 271 DESIGN OF MACHINE ELEMENTS.
PREREQUISITE--M E 224.
3 HOURS

09476	LECT-DISC	P	10-12	MTUWTHFS	343	M E B	BAYNE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

M E 341 ENGINEERING ANALYSIS AND DESIGN.
PREREQUISITE--M E 271, SENIOR STANDING, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 3/4 OR 1 UNIT
THIS COURSE FOR THE SUMMER OF 1967 WILL BE OFFERED ONLY TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIONAL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA. COURSE MAY BE REPEATED FOR A TOTAL OF 4 UNITS.

09484	LECT-DISC	P	8-10	MTUWTHF	335	M E B	

COURSES FOR GRADUATES

M E 408 LABORATORY INVESTIGATIONS IN THERMODYNAMICS.
PREREQUISITE--ONE-YEAR COURSE IN THERMODYNAMICS, ONE HALF-YEAR COURSE IN POWER LABORATORY.
1/2 TO 1 1/2 UNITS

09492	CONF		ARR				STAFF

M E 409 LABORATORY INVESTIGATIONS IN FLUID FLOW, HEAT TRANSFER, AND COMBUSTION
PREREQUISITE--COURSES IN THERMODYNAMICS AND FLUID MECHANICS.
1/2 TO 1 1/2 UNITS

09506	CONF		ARR				STAFF

M E 428 LABORATORY INVESTIGATIONS IN REFRIGERATION.
1/2 TO 1 1/2 UNITS

09514	CONF		ARR				STAFF

M E 429 LABORATORY INVESTIGATIONS IN HEATING AND AIR CONDITIONING.
PREREQUISITE--TWO SEMESTERS OF POWER LABORATORY OR EQUIVALENT.
1/2 TO 1 1/2 UNITS
09522 CONF ARR STAFF

M E 438 LABORATORY INVESTIGATIONS IN POWER MACHINERY.
PREREQUISITE--ONE-YEAR COURSE IN POWER LABORATORY.
1/2 TO 1 1/2 UNITS
09531 CONF ARR STAFF

M E 448 LABORATORY INVESTIGATIONS IN MACHINE DESIGN.
1 UNIT
09549 CONF ARR STAFF

M E 458 LABORATORY INVESTIGATIONS IN PRODUCTION.
1/2 TO 1 1/2 UNITS
09557 CONF ARR STAFF

M E 499 THESIS RESEARCH.
0 TO 2 UNITS
09565 CONF ARR STAFF

MEDIEVAL CIVILIZATION STUDIES PROGRAM

MAJOR--STUDENTS WHO ELECT MEDIEVAL CIVILIZATION AS A MAJOR MUST COMPLETE THE LOWER DIVISION REQUIREMENTS OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES AND FORTY SEMESTER HOURS--WHICH SATISFIES BOTH MAJOR AND MINOR REQUIREMENTS--IN COURSES CHOSEN FROM THE FOLLOWING LIST--ARCH. 214, ART 308 OR 309, CLASS. 301, 302, ENGL. 311, HIST. 301, 302, 303, 304, 305, 333, 345, ITAL. 311, 312, LAT. 104, PHIL. 304, SPCH. 361. OTHER COURSES MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ADVISER--ADVANCED READING COURSES IN ANY FOREIGN LANGUAGE OFFERED BY THE UNIVERSITY ARE STRONGLY RECOMMENDED.
ADVISER--PROFESSOR DENO GEANAKOPLOS, 353 ARMORY.

METALLURGICAL ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR ADVANCED UNDERGRADUATES

MET E 299 THESIS.
PREREQUISITE--SENIOR STANDING, APPROVAL OF HEAD OF DEPARTMENT.
1 TO 3 HOURS
09573 CONF ARR STAFF

COURSES FOR GRADUATES

MET E 485 METALLURGICAL ENGINEERING PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS
09581 CONF ARR STAFF

MET E 486 LABORATORY INVESTIGATIONS IN METALLURGY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 OR 1/2 UNIT
09590 LAB ARR STAFF

MET E 499 THESIS RESEARCH.
0 TO 2 UNITS
09603 CONF ARR STAFF

MICROBIOLOGY

DEPARTMENT OFFICE 127 BUR HALL

MAJOR--TWENTY HOURS OF MICROBIOLOGY, INCLUDING EITHER MCBIO. 100 AND 101, OR MCBIO. 200 AND 201. AN INTRODUCTORY SEQUENCE OF BIOLOGY 110 AND BIOLOGY 111 AND MCBIO. 200 AND 201 ARE RECOMMENDED FOR MAJORS. BOT. 210--ZOOL. 210--AND CHEM. 340,350, AND 355 MAY BE SUBSTITUTED FOR MICROBIOLOGY COURSES TO THE EXTENT OF FIVE HOURS AS PART OF THE MAJOR. QUANTITATIVE AND ORGANIC CHEMISTRY, COLLEGE ALGEBRA, AND TRIGONOMETRY ARE REQUIRED.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, BIOLOGY, BOTANY, CHEMISTRY, ENTOMOLOGY, MATHEMATICS, PHYSICS, PHYSIOLOGY, AND ZOOLOGY. NO COURSE MAY APPLY TO BOTH THE MAJOR AND THE MINOR.

COURSES FOR UNDERGRADUATES

MCBIO 100 INTRODUCTORY MICROBIOLOGY.
*CREDIT IS NOT GIVEN FOR BOTH MCBIO. 100 AND MCBIO. 200.
*3 HOURS

09611	LECT	8	MTUWTHF	124	BUR HALL	HELM

MCBIO 101 INTRODUCTORY EXPERIMENTAL MICROBIOLOGY.
PREREQUISITE--CREDIT OR REGISTRATION IN MCBIO. 100.
*CREDIT IS NOT GIVEN FOR BOTH MCBIO. 101 AND MCBIO. 201.
*2 HOURS

09620	LAB	9-12	M W	242	BUR HALL	GILBEY AND
		9-11	F	242	BUR HALL	ASSISTANTS

COURSES FOR ADVANCED UNDERGRADUATES

MCBIO 207 RESEARCH AND SPECIAL PROBLEMS.
PREREQUISITE--FIFTEEN HOURS OF MICROBIOLOGY, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 10 HOURS.
*3 TO 5 HOURS.

09638	LAB-DISC	ARR			BUR HALL	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MCBIO 326 PATHOGENIC BACTERIOLOGY.
PREREQUISITE--MCBIO. 101 OR 201 OR 309, ORGANIC CHEMISTRY.
5 HOURS OR 1 UNIT

09646	LECT	8	MTUWTHF	136	BUR HALL	MCCAMISH
	LAB	9-12	M W F	202	BUR HALL	MCCAMISH AND ASSISTANTS

COURSES FOR GRADUATES

MCBIO 490 INDIVIDUAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

09654	LAB	ARR			BUR HALL	STAFF

MCBIO 499 THESIS RESEARCH.
0 TO 2 UNITS

09662	CONF	ARR			BUR HALL	STAFF

MILITARY SCIENCE

DEPARTMENT OFFICE 110 ARMORY

BASIC MILITARY CURRICULUM

ENTERING MALE STUDENTS WHO ARE PHYSICALLY QUALIFIED AND WHO HAVE BEEN SELECTED FOR ENROLLMENT MUST, IN ADDITION TO REQUIRED MILITARY SCIENCE COURSES, REGISTER IN EITHER A NATURAL SCIENCE OR SOCIAL SCIENCE GENERAL EDUCATION SEQUENCE ACCEPTABLE TO THE MILITARY SCIENCE DEPARTMENT AND THE STUDENTS COLLEGE. AN ADDITIONAL REQUIREMENT FOR COMMISSIONING IS THE SUCCESSFUL COMPLETION OF PHYSICAL EDUCATION COURSE, P E 120.

COURSES FOR UNDERGRADUATES

MIL S 100 LEADERSHIP LABORATORY-FIRST SEMESTER FRESHMEN ONLY.
PREREQUISITE--APPROVAL OF THE PROFESSOR OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09671	LAB	A	9	M W		ARMORY FLOOR
09689	LAB	B	4	TU TH		ARMORY FLOOR

MIL S 101 INTRODUCTION TO MILITARY SCIENCE.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, CONCURRENT ENROLLMENT IN LEADERSHIP LABORATORY, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09697	LECT-DISC	A	8-10	F	182	ARMORY
09701	LECT-DISC	B	3-5	W	182	ARMORY

MIL S 102 MILITARY MAP AND AERIAL PHOTOGRAPH ANALYSIS.
CREDIT OR REGISTRATION IN MIL S 101, CONCURRENT ENROLLMENT IN LEADERSHIP LABORATORY, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09719	LECT-DISC	A	10-12	TU	182	ARMORY
09727	LECT-DISC	B	1-3	W	182	ARMORY

MIL S 103 INTRODUCTION TO TACTICS.
PREREQUISITE--CREDIT OR REGISTRATION IN MIL S 102, AND CONCURRENT ENROLLMENT IN LEADERSHIP LABORATORY, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09735	LECT-DISC	A	10-12	TH	183	ARMORY
09743	LECT-DISC	B	1-3	M	182	ARMORY

SECOND YEAR STUDENTS SELECTED FOR CONTINUATION MUST, IN ADDITION TO THE REQUIRED MILITARY SCIENCE COURSES, REGISTER IN EITHER A NATURAL SCIENCE OR SOCIAL SCIENCE GENERAL EDUCATION SEQUENCE ACCEPTABLE TO THE MILITARY SCIENCE DEPARTMENT AND THE STUDENTS COLLEGE.

MIL S 111 PRINCIPLES OF MILITARY LEADERSHIP.
PREREQUISITE--MIL. S. 103, CONCURRENT ENROLLMENT IN LEADERSHIP LABORATORY, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
1 HOUR

09751	LECT-DISC	A	10-12	W	183	ARMORY
09760	LECT-DISC	B	1-3	F	183	ARMORY

MIL S 112 AMERICAN MILITARY HISTORY.
PREREQUISITE--MIL. S. 103, CONCURRENT ENROLLMENT IN LEADERSHIP LABORATORY, REGISTRATION IN APPROVED GENERAL EDUCATION, NATURAL OR SOCIAL SCIENCE SEQUENCE.
2 HOURS

09778	LECT-DISC	A	10-12	M F	182	ARMORY
09786	LECT-DISC	B	1-3	TU TH	182	ARMORY

MIL S 125 LEADERSHIP LABORATORY-SECOND SEMESTER FRESHMEN ONLY.
PREREQUISITE--MIL. S. 100 AND APPROVAL OF THE PROFESSOR OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09794	LAB	A	9	M W	ARMORY FLOOR
09808	LAB	B	4	TU TH	ARMORY FLOOR

COURSES FOR ADVANCED UNDERGRADUATES

MIL S 150 LEADERSHIP LABORATORY-FIRST SEMESTER SOPHOMORES ONLY.
PREREQUISITE--MIL. S. 125 AND APPROVAL OF THE PROFESSOR OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09816	LAB	A	9	M W	ARMORY FLOOR
09824	LAB	B	4	TU TH	ARMORY FLOOR

MIL S 175 LEADERSHIP LABORATORY-SECOND SEMESTER SOPHOMORES ONLY.
PREREQUISITE--MIL. S. 150 AND APPROVAL OF THE PROFESSOR OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09832	LAB	A	9	M W	ARMORY FLOOR
09841	LAB	B	4	TU TH	ARMORY FLOOR

ADVANCED MILITARY CURRICULUM

SELECTED MALE STUDENTS WHO HAVE COMPLETED THE BASIC MILITARY COURSE OR ITS EQUIVALENT, AND WHO HAVE SATISFACTORILY PASSED PHYSICAL AND SCREENING EXAMINATIONS MAY APPLY FOR ENROLLMENT IN THE ADVANCED MILITARY CURRICULUM. EACH ADVANCED MILITARY CURRICULUM STUDENT IS PAID A SUBSISTENCE ALLOWANCE. HE MUST ATTEND ROTC SUMMER TRAINING CAMP BETWEEN HIS FIRST AND SECOND YEAR IN THE ADVANCED PROGRAM. SUCCESSFUL COMPLETION OF THE CURRICULUM BY SELECTED STUDENTS NORMALLY RESULTS IN A COMMISSION AS A SECOND LIEUTENANT, U. S. ARMY RESERVE. SELECTED STUDENTS MEETING THE REQUIREMENTS MAY BE COMMISSIONED IN THE REGULAR ARMY.

STUDENTS ENROLLED IN THE REQUIRED MILITARY SCIENCE COURSES MUST, IN ADDITION, ENROLL IN THE THIRD AND IN THE FOURTH YEAR IN AN APPROVED COURSE OF ANOTHER DEPARTMENT. SELECTION OF THESE COURSES MUST BE APPROVED BY THE MILITARY SCIENCE DEPARTMENT ADVISOR AND BE ACCEPTABLE TO THE STUDENTS MAJOR DEPARTMENT.

MIL S 200 LEADERSHIP LABORATORY-FIRST SEMESTER JUNIORS ONLY.
PREREQUISITE--MIL. S. 175 AND APPROVAL OF THE PROFESSOR OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09859	LAB	A	9	M W	ARMORY FLOOR
09867	LAB	B	4	TU TH	ARMORY FLOOR

MIL S 201 PRINCIPLES OF MILITARY INSTRUCTION.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, MIL S 111 AND 112 OR EQUIVALENT, CONNCURRENT ENROLLMENT IN LEADERSHIP LABORATORY.
1 HOUR

09875	LECT-DISC	A	8-10	TH	183	ARMORY
09883	LECT-DISC	B	1-3	M	183	ARMORY

MIL S 203 U. S. ARMY AND NATIONAL SECURITY.
PREREQUISITE--APPROVAL OF PROFESSOR OF MILITARY SCIENCE, MIL. SCI. 111 AND 112 OR EQUIVALENT, CONCURRENT ENROLLMENT IN LEADERSHIP LABORATORY.
1 HOUR

09891	LECT-DISC	A	8	M W	183	ARMORY
09905	LECT-DISC	B	3	TU TH	183	ARMORY

MIL S 210 MILITARY LAW.
PREREQUISITE--MIL. S. 202 AND CONCURRENT ENROLLMENT
IN LEADERSHIP LABORATORY.
1 HOUR

09913	LECT-DISC	A	8-10	TU		183	ARMORY
09921	LECT-DISC	B	3-5		F	183	ARMORY

MIL S 211 PROSEMINAR.
PREREQUISITE--CREDIT OR REGISTRATION IN MIL. SCI. 210, CONCURRENT
ENROLLMENT IN LEADERSHIP LABORATORY.
1 HOUR

09930	LECT-DISC	A	8-10		F	183	ARMORY
09948	LECT-DISC	B	3-5	M		183	ARMORY

MIL S 225 LEADERSHIP LABORATORY-SECOND SEMESTER JUNIORS ONLY.
PREREQUISITE--MIL. S. 200 AND APPROVAL OF THE PROFESSOR
OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09956	LAB	A	9	M W		ARMORY FLOOR
09964	LAB	B	4	TU TH		ARMORY FLOOR

MIL S 250 LEADERSHIP LABORATORY-FIRST SEMESTER SENIORS ONLY.
PREREQUISITE--MIL. S. 225 AND APPROVAL OF THE PROFESSOR
OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09972	LAB	A	9	M W		ARMORY FLOOR
09981	LAB	B	4	TU TH		ARMORY FLOOR

MIL S 275 LEADERSHIP LABORATORY-SECOND SEMESTER SENIORS ONLY.
PREREQUISITE--MIL. S. 250 AND APPROVAL OF THE PROFESSOR
OF MILITARY SCIENCE.
FIELD TRIP MAY BE REQUIRED.
NO CREDIT
ATTENDANCE AT TWO CEREMONIES IS REQUIRED.
TIME AND DATE OF CEREMONIES TO BE ANNOUNCED.

09999	LAB	A	9	M W		ARMORY FLOOR
10007	LAB	B	4	TU TH		ARMORY FLOOR

MINING ENGINEERING

DEPARTMENT OFFICE 201 M M B

COURSES FOR GRADUATES

MIN E 497 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 1 UNIT

10015	CONF	ARR	STAFF

MIN E 499 THESIS RESEARCH.
0 TO 2 UNITS

10023	CONF	ARR	STAFF

MUSIC

DEPARTMENT OFFICE 100 S M H

COURSES FOR UNDERGRADUATES

MUSIC 101 THEORY OF MUSIC, I.
FOR NON-MUSIC STUDENTS.
PREREQUISITE--MUSIC 100 OR EQUIVALENT.
3 HOURS

10031	LECT-DISC	A	9-11	MTUWTHF	106	S M H	POWELL

MUSIC 102 THEORY OF MUSIC, II.
PREREQUISITE--MUSIC 101.
3 HOURS

10040	LECT-DISC	A	9	MTUWTHF	8	S A	CARTER

MUSIC 107 EAR TRAINING, SIGHT SINGING, AND KEYBOARD HARMONY, I.
PREREQUISITE--MUSIC 101.
1 HOUR

10058	LAB-DISC	A	8	TUWTHF	8	S A	POWELL

MUSIC 130 INTRODUCTION TO THE ART OF MUSIC, I.
FOR NON-MUSIC STUDENTS ONLY.
3 HOURS

10066	LECT-DISC	A	9	TUWTHF	25	S M H	BARNDT

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 229 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

10074	CONF	A	ARR		204	H A	NETTL

MUSIC 241 MUSIC FOR ELEMENTARY TEACHERS, II.
PREREQUISITE--MUSIC 240. REQUIRED FOR STATE ELEMENTARY SCHOOL CERTIFICATE BUT NO CREDIT GRANTED IN SCHOOL OF MUSIC.
3 HOURS

10082	LECT-DISC	A	1	TUWTHF	104	1203 W NEV	J LEVY

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 301 FUGUE.
PREREQUISITE--MUSIC 300 AND/OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

10091	LECT-DISC	A	9	MTUWTHF	116	1203 W NEV	FREDRICKSON

MUSIC 306 COMPOSITION.
PREREQUISITE--MUSIC 104 OR 106 OR CONSENT OF INSTRUCTOR.
2 TO 4 HOURS, OR 1/2 OR 1 UNIT

10104	CONF	A	ARR		108	S M H	KESSLER
10112	CONF	B	ARR		203	T A	FREDRICKSON
10121	CONF	C	ARR		200	T A	KELLY

MUSIC 308 ANALYSIS OF MUSICAL FORM.
PREREQUISITE--MUSIC 104 AND 109, OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

10139	LECT-DISC	A	11	MTUWTHF	8	S A	FARRELL

MUSIC 311 MUSIC IN THE RENAISSANCE.
PREREQUISITE--MUSIC 131 OR 214 OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

10147	LECT-DISC	A	8	TUWTHF	25	S M H	KELLMAN

MUSIC 312 MUSIC OF THE BAROQUE AND CLASSICAL PERIODS.
PREREQUISITE--MUSIC 131 OR 214 OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

10155	LECT-DISC	A	10	TUWTHF	25	S M H	KELLMAN

MUSIC 315 CONTEMPORARY MUSIC.
PREREQUISITE--JUNIOR STANDING AND/OR CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT

10163	LECT-DISC	A	1	TUWTHF	116	1203 W NEV	HAMM

MUSIC 316 INTRODUCTION TO MUSIC OF THE WORLDS CULTURES
SAME AS ANTH. 316.
FOR STUDENTS OUTSIDE THE SCHOOL OF MUSIC.
PREREQUISITE--ANTH. 103 OR CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

10171	LECT-DISC	A	11	TUWTHF	104	1203 W NEV	NETTL

MUSIC 317 AREA STUDIES IN ETHNOMUSICOLOGY.
SAME AS ANTH. 315.
PREREQUISITE--SENIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 12 HOUR, OR 2 UNITS
*3 HOURS OR 1/2 UNIT
TOPIC--SOUTH ASIAN MUSIC.

10180	LECT-DISC	A	1-3	TU TH	8	S A	NETTL & STAFF

MUSIC 330 APPLIED MUSIC PEDAGOGY.
PREREQUISITE--JUNIOR STANDING IN MUSIC OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 HOURS, OR 1 UNIT
*2 HOURS OR 1/2 UNIT
*SECTION-A-IS FOR PIANO MAJORS. SECTION-B-IS FOR STRING MAJORS.
SECTION-C-IS FOR VOICE MAJORS.

10198	LAB-DISC	*A	9	TUWTHF	5	P A	RUPPEL
10201	LAB-DISC	*B	ARR				D MILLER
10210	LAB-DISC	*C	ARR		210	S H	G WILSON

MUSIC 340 INSTRUMENTAL CLINIC AND BAND PAGEANTRY.
PREREQUISITE--ADVANCED UNDERGRADUATE OR GRADUATE WITH MAJOR WORK
OR EXPERIENCE IN BAND OR ORCHESTRA.
2 HOURS OR 1/2 UNIT

10228	LECT-DISC		11	MTUWTH	228	BAND	KISINGER

MUSIC 342 PERCUSSION METHODS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION, AND
MUSIC 174 AND 257 OR EQUIVALENT.
3 HOURS OR 1/2 UNIT

10236	LECT-DISC	A	11	TUWTHF	6	S M H	MCKENZIE

MUSIC 346 WORKSHOP IN MUSIC EDUCATION.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR
CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*2 OR 4 HOURS, OR 1/2 OR 1 UNIT
SECTION A--NEW TRENDS IN ELEMENTARY MUSIC EDUCATION.
SECTION B--MUSIC LITERATURE FOR GENERAL MUSIC IN SECONDARY SCHOOLS.
MEETS FIRST FOUR WEEKS.

10244	LECT-DISC	A	2-4	TUWTHF	104	1203 W NEV	SMITH AND VISITING LECTURERS
10252	LECT-DISC	B	1-3	TUWTHF	25	S M H	BARNDT

MUSIC 347 TEACHING OF WOODWIND INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION
OR CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT

10261	LECT-DISC	A	1	TUWTHF	5	S M H	COGGINS EDLEFSEN MCDOWELL

MUSIC 348 TEACHING OF BRASS INSTRUMENTS.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC EDUCATION OR
CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT

10279	LECT-DISC	A	8	TUWTHF	5	S M H	GRAY HOLDEN,LOWREY NUTAITIS

MUSIC 401 ADVANCED INSTRUMENTATION-BAND.
PREREQUISITE--UNDERGRADUATE INSTRUMENTATION.
1/2 OR 1 UNIT

10287	LECT-DISC		10	TUWTHF	167	BAND		HINDSLEY

MUSIC 402 ANALYSIS IN RELATION TO PERFORMANCE AND INTERPRETATION, I.
PREREQUISITE--MUSIC 104 OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT
*ADDITIONAL HOURS TO BE ARRANGED.

10295	LECT-DISC	A	*9-11	TUWTHF	104	1203 W NEV		SMITH LEONHARD

MUSIC 406 COMPOSITION.
1/2 TO 1 1/2 UNITS

10309	CONF	A	ARR		108	S M H		KESSLER
10317	CONF	B	ARR		203	T A		FREDRICKSON
10325	CONF	C	ARR		200	T A		KELLY

MUSIC 433 ADVANCED CHORAL LITERATURE AND CONDUCTING.
PREREQUISITE--GRADUATE STANDING IN MUSIC, MUSIC 432 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1 UNIT

10333	LECT-DISC	A	11-1	TUWTHF	25	S M H		LANNON

MUSIC 435 VOCAL LITERATURE.
PREREQUISITE--BACHELOR OF MUSIC OR BACHELOR OF SCIENCE IN MUSIC EDUCATION, OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

10341	LECT-DISC	A	1-3	W F	215	S M H		KELLOGG

MUSIC 438 WIND INSTRUMENT LITERATURE.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT
*SECTION A--WOODWIND AND SECTION B--BRASS.

10350	LECT-DISC	*A	ARR		2	S M H		EDLEFSEN

MUSIC 440 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION, I.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

10368	LECT-DISC	A	8	TUWTHF	104	1203 W NEV		LEONHARD

MUSIC 442 THE GENERAL MUSIC PROGRAM IN SECONDARY SCHOOLS.
PREREQUISITE--GRADUATE STANDING IN MUSIC EDUCATION.
1/2 OR 1 UNIT
FIRST FOUR WEEKS.

10376	LECT-DISC	A	10-12	TUWTHF	100	S H		J LEVY

MUSIC 450 HISTORY OF VOCAL ENSEMBLE AND CHORAL MUSIC, I.
1 UNIT

10384	LECT-DISC	A	1-3	TUW F	201	H A		HANSELL

NOTE--STUDENTS IN MUSIC CURRICULA RECEIVE THREE OR FOUR HOURS FOR THEIR MAJOR OR PRINCIPAL SUBJECT.

AS A PART OF THE REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE, SENIOR STUDENTS MUST PRESENT A PUBLIC RECITAL WHICH MEETS WITH SCHOOL OF MUSIC FACULTY APPROVAL AND CONFORMS WITH DEPARTMENTAL REQUIREMENTS.

MUSIC STUDENTS RECEIVE TWO HOURS CREDIT FOR THEIR MINOR OR SECONDARY SUBJECT.

STUDENTS FROM OTHER COLLEGES RECEIVE TWO HOURS CREDIT FOR WORK IN APPLIED MUSIC IF IN ACCORDANCE WITH THE REGULATIONS OF THEIR COLLEGE.
PASSING OF A PERFORMING EXAMINATION IS REQUIRED AS A PREREQUISITE TO THE INITIAL REGISTRATION IN ANY APPLIED MUSIC COURSE.

APPLIED MUSIC COURSES FOR UNDERGRADUATES

MUSIC 180	PIANO.						
1 OR 2 HOURS							
10392	CONF	A	ARR	201	S M H		SANDERS
10406	CONF	B	ARR	112	S M H		FLETCHER
10414	CONF	C	ARR	205	S M H		BILSON
MUSIC 181	VOICE.						
1 OR 2 HOURS							
10422	CONF	A	ARR	211	S M H		FOOTE
10431	CONF	B	ARR	200A	S M H		W MILLER
10449	CONF	C	ARR	210	S H		G WILSON
10457	CONF	D	ARR	215	S M H		KELLOGG
10465	CONF	E	ARR	204	S H		
MUSIC 182	ORGAN.						
1 OR 2 HOURS							
10473	CONF	A	ARR	200	S M H		PETTINGA
MUSIC 183	VIOLIN.						
1 OR 2 HOURS							
10481	CONF	A	ARR	101	S A		GRANAT
10490	CONF	B	ARR	205	S A		FARMER
MUSIC 184	VIOLA.						
1 OR 2 HOURS							
10503	CONF	A	ARR	203	S A		GARVEY
10511	CONF	B	ARR	205	S A		FARMER
MUSIC 185	CELLO.						
1 OR 2 HOURS							
10520	CONF	A	ARR	201	S A		SWENSON
MUSIC 186	STRING BASS.						
1 OR 2 HOURS							
10538	CONF	A	ARR	9	S M H		KROLICK
MUSIC 187	FLUTE.						
1 OR 2 HOURS							
10546	CONF	A	ARR	10	S M H		HOWELL
MUSIC 188	CLARINET.						
1 OR 2 HOURS							
10554	CONF	A	ARR	11	S M H		MCDOWELL
MUSIC 189	OBOE.						
1 OR 2 HOURS							
10562	CONF	A	ARR	2	S M H		EDLEFSEN

MUSIC 190 BASSOON.
1 OR 2 HOURS

10571	CONF	A	ARR				

MUSIC 191 CORNET AND TRUMPET.
1 OR 2 HOURS

10589	CONF	A	ARR	14	S	M H	LOWREY

MUSIC 192 FRENCH HORN.
1 OR 2 HOURS

10597	CONF	A	ARR	4	S	M H	HOLDEN

MUSIC 193 TROMBONE.
1 OR 2 HOURS

10601	CONF	A	ARR	8	S	M H	GRAY

MUSIC 194 BARITONE.
1 OR 2 HOURS

10619	CONF	A	ARR	207	P	A	NUTAITIS

MUSIC 195 TUBA.
1 OR 2 HOURS

10627	CONF	A	ARR	207	P	A	NUTAITIS

MUSIC 196 PERCUSSION.
1 OR 2 HOURS

10635	CONF	A	ARR	6	S	M H	MCKENZIE

MUSIC 197 HARP.
1 OR 2 HOURS

10643	CONF	A	ARR	113	S	M H	KLEINSTEUBER

MUSIC 198 ALTO SAXOPHONE.
1 OR 2 HOURS

10651	CONF	A	ARR	12	S	M H	COGGINS

APPLIED MUSIC COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PREREQUISITE--FOR STUDENTS IN THE BACHELOR OF MUSIC CURRICULUM, JUNIOR STANDING IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN MUSIC EDUCATION, COMPLETION OF THE CURRICULAR REQUIREMENT IN THE MAJOR APPLIED MUSIC SUBJECT. FOR STUDENTS IN OTHER COLLEGES OF THE UNIVERSITY, COMPLETION OF FOUR SEMESTERS IN THE COMPARABLE APPLIED MUSIC COURSE AT THE 100 LEVEL. QUALIFYING EXAM FOR TRANSFER STUDENTS.

MUSIC 380 PIANO.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10660	CONF	A	ARR	201	S	M H	SANDERS
10678	CONF	B	ARR	112	S	M H	FLETCHER
10686	CONF	C	ARR	205	S	M H	BILSON

MUSIC 381 VOICE.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10694	CONF	A	ARR	211	S	M H	FOOTE
10708	CONF	B	ARR	200A	S	M H	W MILLER
10716	CONF	C	ARR	210	S	H	G WILSON
10724	CONF	D	ARR	215	S	M H	KELLOGG

MUSIC 382 ORGAN.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10732	CONF	A	ARR	200	S	M H	PETTINGA

MUSIC 383 VIOLIN.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10741	CONF	A	ARR	101	S	A	GRANAT

MUSIC 384 VIOLA.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10759	CONF	A	ARR	203	S	A	GARVEY

MUSIC 385 CELLO.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10767	CONF	A	ARR	201	S	A	SWENSON

MUSIC 386 STRING BASS.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10775	CONF	A	ARR	9	S	M	H	KROLICK

MUSIC 387 FLUTE.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10783	CONF	A	ARR	10	S	M	H	HOWELL

MUSIC 388 CLARINET.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10791	CONF	A	ARR	11	S	M	H	MCDOWELL

MUSIC 389 OBOE.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10805	CONF	A	ARR	2	S	M	H	EDLEFSEN

MUSIC 390 BASSOON.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10813	CONF	A	ARR

MUSIC 391 CORNET AND TRUMPET.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10821	CONF	A	ARR	14	S	M	H	LOWREY

MUSIC 392 FRENCH HORN.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10830	CONF	A	ARR	4	S	M	H	HOLDEN

MUSIC 393 TROMBONE.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10848	CONF	A	ARR	8	S	M	H	GRAY

MUSIC 394 BARITONE.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10856	CONF	A	ARR	207	P	A	NUTAITIS

MUSIC 395 TUBA.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10864	CONF	A	ARR	207	P	A	NUTAITIS

MUSIC 396 PERCUSSION.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10872	CONF	A	ARR	6	S	M	H	MCKENZIE

MUSIC 397 HARP.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10881	CONF	A	ARR	113	S	M	H	KLEINSTEUBER

MUSIC 398 SAXOPHONE.
1 OR 2 HOURS, OR 1/4 OR 1/2 UNIT

10899	CONF	A	ARR	12	S	M	H	COGGINS

APPLIED MUSIC COURSES FOR GRADUATES

MUSIC 480 PIANO.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10902	CONF	A	ARR	201	S	M	H	SANDERS
10911	CONF	B	ARR	112	S	M	H	FLETCHER
10929	CONF	C	ARR	205	S	M	H	BILSON

MUSIC 481 VOICE.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10937	CONF	A	ARR	211	S M H		FOOTE
10945	CONF	B	ARR	200	S M H		W MILLER
10953	CONF	C	ARR	210	S H		G WILSON
10961	CONF	D	ARR	215	S M H		KELLOGG

MUSIC 482 ORGAN.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10970	CONF	A	ARR	200	S M H		PETTINGA

MUSIC 483 STRING INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10988	CONF	A	ARR	201	S A		SWENSON AND STRING FACULTY

MUSIC 484 WIND INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCCESSFUL COMPLETION OF QUALIFYING EXAMINATION GIVEN BY GRADUATE COMMITTEE.
1/2 OR 1 UNIT

10996	CONF	A	ARR	11	S M H		MCDOWELL AND WIND FACULTY

MUSIC 485 PERCUSSION INSTRUMENTS.
PREREQUISITE--BACHELOR OF MUSIC DEGREE, SUCESSFUL COMPLETION OF A QUALIFYING EXAMINATION GIVEN BY THE GRADUATE COMMITTEE.
1/2 OR 1 UNIT

11002	CONF	A	ARR	6	S M H		MCKENZIE

MUSIC 489 DOCTORAL PROJECTS.
OPEN ONLY TO STUDENTS IN THE DOCTOR OF MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 3 UNITS

11011	CONF	A	ARR	210	1203 W NEV		GOLDTHWAITE AND GRADUATE FACULTY

MUSIC 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF ADVISOR.
0 TO 2 UNITS

11029	CONF	A	ARR	210	1203 W NEV		GOLDTHWAITE AND GRADUATE FACULTY

SUPPLEMENTARY INSTRUMENTS

NOTE--THESE COURSES ARE OPEN AS ELECTIVES TO STUDENTS FROM OTHER COLLEGES. IN COURSES INVOLVING TWO INSTRUMENTS, TWO DAYS A WEEK ARE SPENT ON EACH INSTRUMENT FOR THE ENTIRE SEMESTER. PREREQUISITE FOR ALL NON-MUSIC STUDENTS--CONSENT OF INSTRUCTOR.

COURSES FOR UNDERGRADUATES

MUSIC 177 CLASS PIANO INSTRUCTION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
2 HOURS
*FOR NON-MUSIC STUDENTS ONLY

11037	LAB-DISC	*A	8	TUWTHF	5	P A	RUPPEL

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 377 CLASS PIANO-ADVANCED-.
PREREQUISITE--MUSIC 180-12 HOURS COMPLETED-, 104 AND 109, OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 4 HOURS OR 1 UNIT.
*2 HOURS OR 1/2 UNIT

11045	LAB-DISC	A	10	TUWTHF	5	P A	RUPPEL

ENSEMBLE COURSES

NOTE--ALL ENSEMBLE COURSES REQUIRE CONSENT OF INSTRUCTOR.

FOR BAND ENSEMBLE CREDIT SEE BANDS.

COURSES FOR ADVANCED UNDERGRADUATES

MUSIC 250 UNIVERSITY ORCHESTRA.
1/2 HOUR

11053	PRACT	A	730-930PM	TU	RECITAL HALL		GARVEY

MUSIC 261 UNIVERSITY CHORUS.
NOTE--OPEN TO STUDENTS, FACULTY AND TOWNSPEOPLE.
1/2 HOUR

11061	PRACT	A	12	TUWTHF	25	S M H	LANNON

MUSIC 265 OPERA WORKSHOP AND ENSEMBLE.
1/2 HOUR

11070	PRACT	A	3-6	TU TH	5	S M H	ZIRNER

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 350 ADVANCED ENSEMBLE MUSIC.
PREREQUISITE--REGISTRATION IN APPLIED MUSIC AT THE 300 LEVEL AND CONSENT OF INSTRUCTOR.
1 HOUR OR 1/4 UNIT
*SECTION A IS FOR INSTRUMENTAL, SECTION B FOR OPERATIC, SECTION C FOR COLLEGIUM.

11088	PRACT	*A	ARR		201	S A	GARVEY SWENSON
11096	PRACT	*B	ARR		205	S H	ZIRNER

MUSIC LITERATURE COURSES

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

MUSIC 320 PROSEMINAR.
PREREQUISITE--SENIOR OR GRADUATE STANDING IN MUSIC OR MUSIC EDUCATION, CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE 8 HOURS OR 2 UNITS.
*2 OR 4 HOURS, OR 1/2 OR 1 UNIT

11100	CONF	A	ARR		204	H A	HAMM, NETTL
11118	LAB-DISC	B	10	TUW F	8	S A	FARRELL

MUSIC 323 OPERA PRODUCTION, I.
PREREQUISITE--MUSIC 265, 381, AND CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

11126	CONF	A	ARR		205	S H	ZIRNER

COURSES FOR GRADUATES

MUSIC 420 SEMINAR IN MUSIC LITERATURE.
REQUIRED OF ALL STUDENTS ENROLLED IN THE DOCTORAL MUSICAL ARTS PROGRAM.
PREREQUISITE--CONSENT OF INSTRUCTOR.
*STUDENTS MAY ACCUMULATE TWO UNITS.
*1 UNIT

11134	LECT-DISC	A	10-12	W F	101	H A		GOLDTHWAITE

MUSIC 427 BEETHOVEN, II.
1/2 OR 1 UNIT

11142	LECT-DISC	A	9-11	TU TH	101	H A		MACDONALD

NUCLEAR ENGINEERING

DEPARTMENT OFFICE 214 N E L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NUC E 397 RADIOCHEMISTRY.
SAME AS CHEM. 397.
PREREQUISITE--ONE SEMESTER OF PHYSICAL CHEMISTRY, OR ONE SEMESTER OF ATOMIC PHYSICS, OR CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT
*ONE ADDITIONAL HOUR TO BE ARRANGED.

11151	LECT		*9	MTUWTHF	254	ADMIN		VAN HISE

COURSES FOR GRADUATES

NUC E 451 REACTOR LABORATORY.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

11169	LECT-DISC		ARR		101	NUC REAC		
11177	LAB	A	1-5	M W	NUC REACTOR LAB			
11185	LAB	B	1-5	TU TH	NUC REACTOR LAB			

NUC E 454 NUCLEAR ENGINEERING LABORATORY INVESTIGATIONS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 1 1/2 UNITS

11193	CONF		ARR					STAFF

NUC E 490 SPECIAL TOPICS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT
*SECTION E TOPIC--THERMONUCLEAR.
*SECTION I TOPIC--NUCLEAR INSTRUMENTATION.

11207	LECT-DISC	*E	8-10	M W F	203	N E L		
11215	LECT-DISC	*I	10-12	M W F	203	N E L		

NUC E 495 NUCLEAR ENGINEERING PROBLEMS.
PREREQUISITE--AT LEAST THREE UNITS OF GRADUATE WORK AND CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

11223	CONF		ARR					STAFF

NUC E 497 SEMINAR IN NUCLEAR SCIENCE AND ENGINEERING.
0 UNIT

11231	LECT-DISC		11	TH	203	N E L		

NUC E 499 THESIS RESEARCH.
0 TO 2 UNITS

11240	CONF		ARR					STAFF

PERSIAN

COURSES FOR ADVANCED UNDERGRADUATES

PERS 207 INTRODUCTION TO PERSIAN.
6 HOURS
MEETS JUNE 20 THROUGH AUGUST 25.

11258	LECT-DISC		10-12	MTUWTH	254	E E B	TIKKU

PHILOSOPHY

DEPARTMENT OFFICE 105 G H

MAJOR--TWENTY HOURS FROM ANY COURSES OFFERED BY THE DEPARTMENT, INCLUDING PHIL. 102, 303, 306, 321, AND ONE ADDITIONAL 300 COURSE IN PHILOSOPHY.

MINORS--TWENTY COURSE HOURS FROM THE SUBJECTS RECOGNIZED AS MAJORS BY THE COLLEGE OF LIBERAL ARTS AND SCIENCES, OR FROM ANY APPROVED LAS INTERDEPARTMENTAL CURRICULUM, OR FROM EDUCATION OR LIBRARY SCIENCE OR LINGUISTICS. RHETORIC 101, 102, 107, 108, FIRST-YEAR MODERN FOREIGN LANGUAGE COURSES, AND COURSES IN APPLIED MUSIC ARE EXCLUDED. IF TWO DEPARTMENTS OR CURRICULA ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH.

COURSES FOR UNDERGRADUATES

FRESHMAN JAMES SCHOLARS ARE AUTOMATICALLY PERMITTED TO TAKE ANY 100 LEVEL PHILOSOPHY COURSE.

PHIL 101 INTRODUCTION TO PHILOSOPHY.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

11266	LECT-DISC	B	9-11	M W F	321	G H	LILJE
11274	LECT-DISC	E	1-3	M W F	321	G H	LILJE

PHIL 102 LOGIC.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
3 HOURS

11282	LECT-DISC	C	10-12	M W F	311	G H	WENGERT
11291	LECT-DISC	F	2-4	M W F	311	G H	WENGERT

PHIL 105 MORAL IDEAS AND PRACTICE.
PREREQUISITE--SOPHOMORE STANDING OR CONSENT OF CHAIRMAN OF THE DEPARTMENT.
*CREDIT IS NOT GIVEN FOR BOTH PHIL. 105 AND 103.
*2 HOURS

11304	LECT-DISC	D	1240-2	M W F	311	G H	CHANDLER

COURSES FOR ADVANCED UNDERGRADUATES

PHIL 291 READING COURSE.
COURSE MAY BE REPEATED TO A TOTAL OF 4 HOURS OF CREDIT.
PREREQUISITE--JUNIOR OR SENIOR WITH A GENERAL GRADE POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

11312	CONF	&	ARR				TIEBOUT, CHANDLER KUBITZ

PHIL 292 THESIS.
COURSE MAY BE REPEATED TO A TOTAL OF 4 HOURS OF CREDIT.
PREREQUISITE--SENIOR WITH A GENERAL GRADE-POINT AVERAGE OF 4.0 OR WITH CONSENT OF CHAIRMAN OF DEPARTMENT.
2 TO 4 HOURS

11321	CONF	&	ARR							CHANDLER TIEBOUT KUBITZ

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOPHOMORE JAMES SCHOLARS WHO HAVE HAD NO PHILOSOPHY COURSES ARE PERMITTED TO TAKE PHIL. 303, 306, 307, AND 308. THOSE WHO HAVE HAD A PHILOSOPHY COURSE MAY TAKE ANY 300-LEVEL PHILOSOPHY COURSE.

PHIL 307 HISTORY OF MODERN PHILOSOPHY.
BACON, HOBBES, LOCKE, BERKELEY, HUME.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS OR 1/2 UNIT

11339	LECT-DISC	10	M	W	F	313	G	H		CHANDLER

PHIL 308 HISTORY OF MODERN PHILOSOPHY.
DESCARTES, SPINOZA, LEIBNITZ, KANT.
PHIL. 307 AND 308 TAKEN CONCURRENTLY IN THE SUMMER SESSION ARE THE EQUIVALENT OF PHIL. 306.
2 HOURS OR 1/2 UNIT

11347	LECT-DISC	11	M	W	F	313	G	H		WALLACE

PHIL 311 PHILOSOPHIC IDEAS OF THE NINETEENTH AND TWENTIETH CENTURIES.
3 HOURS, OR 3/4 OR 1 UNIT

11355	LECT-DISC	1-3	M	W	F	313	G	H		KUBITZ

PHIL 321 ETHICS AND VALUE THEORY.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT

11363	LECT-DISC	2-4	M	W	F	221	G	H		WALLACE

PHIL 361 COMPARATIVE RELIGIONS--THE RELIGIONS OF THE EAST.
PREREQUISITE--ONE COURSE IN PHILOSOPHY.
3 HOURS, OR 3/4 OR 1 UNIT

11371	LECT-DISC	830-10	TUWTHF			311	G	H		TIEBOUT

PHIL 375 INTRODUCTION TO INDIAN PHILOSOPHY WITH SPECIAL REFERENCE TO LOGIC AND THE PHILOSOPHY OF LANGUAGE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 1 UNIT

11380	LECT	10-12	M	W	F	143	ADMIN			STAAL

MEN ENTERING THE UNIVERSITY WITH LESS THAN SIXTY SEMESTER HOURS OF CREDIT--EXCEPT VETERANS WHO RECEIVE CREDIT BECAUSE OF MILITARY SERVICE, BUT WHO MAY ELECT TO TAKE PHYSICAL EDUCATION--ARE REQUIRED TO OBTAIN CREDIT FOR FOUR SEMESTERS OF PHYSICAL EDUCATION, INCLUDING THE AMOUNT TRANSFERRED. ONE OF THE COURSES MUST BE PEM 100, WHICH WILL BE TAKEN IN THE FRESHMAN YEAR. CREDIT MAY BE OBTAINED BY PASSING COURSES LISTED BELOW OR BY PASSING PROFICIENCY EXAMINATIONS WHICH ARE OFFERED AT TIMES SPECIFIED BY DEPARTMENT. PERMITS FOR TAKING PROFICIENCY EXAMINATIONS MUST BE SECURED IN ROOM 201 MENS OLD GYMNASIUM NOT LATER THAN 48 HOURS PRECEDING EACH EXAMINATION. STUDENTS ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS IN COURSES IN WHICH THEY ARE CURRENTLY REGISTERED. STUDENTS ENROLLED IN PRESCRIBED EXERCISE ARE NOT PERMITTED TO TAKE PROFICIENCY EXAMINATIONS WITHOUT SPECIAL WRITTEN PERMISSION FROM THE COORDINATOR OF PRESCRIBED EXERCISE.

OFFICE FOR BASIC INSTRUCTION COURSES--201 MENS OLD GYMNASIUM.

OFFICE FOR PROFESSIONAL COURSES--119 HUFF GYMNASIUM.

BASIC INSTRUCTION COURSES FOR UNDERGRADUATES

NOTE-- MOST PEM BASIC INSTRUCTION COURSES HAVE BEEN ARRANGED IN SEQUENCES TO FACILITATE REGISTRATION OF ADVANCE- ENROLLED STUDENTS IN BASIC INSTRUCTION COURSES. THESE SEQUENCES ARE AS FOLLOWS-

SEQUENCE 1 - PEM 118, 120
SEQUENCE 2 - PEM 124, 127, 128, 129, 130
SEQUENCE 3 - PEM 115, 123, 134, 135, 137, 145
SEQUENCE 4 - PEM 133, 136, 142, 143
SEQUENCE 5 - PEM 112, 132, 138

STUDENTS REQUESTING A COURSE IN ONE OF THE ABOVE SEQUENCES WILL BE SCHEDULED IN ONE OF THE OTHER COURSES IN THAT SEQUENCE IF SECTIONS OF THE REQUESTED COURSE ARE CLOSED.

P E M 101 PRESCRIBED EXERCISE.
PREREQUISITE--ASSIGNMENT BY THE HEALTH SERVICE.
*STUDENTS MAY ACCUMULATE 3 HOURS.
1 HOUR

11398	LAB	H	3	M	W	F	106 MOG ANNEX

P E M 132 ARCHERY.
1 HOUR

11401	LAB	CC	10-12	M	W	ARCHERY RANGE

NOTE--FIRST CLASS MEETING IN EAST BALCONY, MENS OLD GYM ANNEX.

P E M 135 TENNIS.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.

11410	LAB	AA	8-10	M	W	GREGORY CTS
11428	LAB	HH	3-5	M	W	GREGORY CTS

NOTE--FIRST CLASS MEETING WILL BE HELD IN NORTH BALCONY HUFF GYM.

P E M 136 BADMINTON.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.

11436	LAB	QQ	1-3	TU TH	100 H G

P E M 137 BOWLING.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.

11444	LAB	FF	1-3	M	W	60 I U ALLEYS

P E M 138 GOLF.
1 HOUR
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.

11452	LAB	LL	8-10	TU TH	FLD C H G	

NOTE--FIRST CLASS MEETING WILL BE HELD IN WEST BALCONY, HUFF GYM.

P E M 140 CANOEING AND SMALL CRAFT OPERATION.
PREREQUISITE--ABILITY TO JUMP OR DIVE INTO DEEP WATER
WHILE CLOTHED AND MAINTAIN A SURVIVAL POSITION FOR TEN MINUTES.
1 HOUR
REGISTRATION IS LIMITED TO STUDENTS WITH FREE PERIOD
PRECEDING THE COURSE HOUR.
CLASS MEETS TWICE A WEEK FOR ONE HOUR AND 30 MINUTES.

11461	LAB	SS	3-5	TU TH	CRYSTAL LAKE	

NOTE--FIRST CLASS MEETING WILL BE HELD IN 202 MENS OLD GYM.

P E M 142 BALLROOM DANCE.
1 HOUR

11479	LAB	L	7-9PM	M W	310 W GYM	
11487	LAB	X	7-9PM	TU TH	310 W GYM	

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E M 213 ADVANCED FOOTBALL.
PREREQUISITE--P.E.M. 152.
1 HOUR
FIRST FOUR WEEKS OF SUMMER SESSION.

11495	LECT-DISC	7	MTUWTH	209 H G		HART

P E M 214 ADVANCED BASKETBALL.
PREREQUISITE--P.E.M. 151.
1 HOUR
SECOND FOUR WEEKS OF SUMMER SESSION.

11509	LECT-DISC	7	MTUWTH	209 H G		LUCK

P E M 217 THEORY OF COACHING.
PREREQUISITE--P.E.M. 213 AND P.E.M. 214, OR CONSENT OF INSTRUCTOR.
2 HOURS

11517	LECT-DISC	8	MTUWTH	211 H G		

P E M 250 SPECIAL PROBLEMS.
SAME AS H. ED., P.E.W., AND REC. 250.
PREREQUISITE--JUNIOR OR SENIOR STANDING--MINIMUM GRADE POINT
AVERAGE OF 3.5--CONSENT OF FACULTY ADVISOR AND INSTRUCTOR.
APPROVAL OF DEPARTMENT HEAD.
*MAY BE REPEATED FOR A TOTAL OF 4 OR 6 HOURS OF CREDIT.
*2 OR 3 HOURS

11525	LAB-DISC	ARR				RAZOR

PHYSICAL EDUCATION

DEPARTMENT OFFICE 121 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

P E 302 PROBLEMS OF FACILITIES PLANNING, CONSTRUCTION, AND
UTILIZATION.
PREREQUISITE--P. E. M. 204 OR P. E. W. 204, OR EQUIVALENT, OR
CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT
THIS COURSE WILL END ON JULY 28.

11533	LECT-DISC	10	MTUWTHF	49 L I R		KENNEY

P E 401 ADMINISTRATION OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--P.E.M. OR P.E.W. 204 OR EQUIVALENT.
1 UNIT

11541	LECT-DISC	830-10	MTUWTH	207A	H G	MATTHEWS, ZEIGLER

P E 402 HISTORY OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--P.E.M. OR P.E.W. 209 OR EQUIVALENT.
1 UNIT

11550	LECT-DISC	8	MTUWTH	209	H G	FLATH

P E 406 PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT.
PREREQUISITE--PHIL. 101 AND HP. ED. 305.
1 UNIT

11568	LECT-DISC	10	MTUWTH	207A	H G	VANDERZWAAG

P E 407 SPORT PSYCHOLOGY.
PREREQUISITE--PSYCH. 100, ED. PSY. 211, CONSENT OF INSTRUCTOR.
1 UNIT
*TWO ADDITIONAL HOURS 2-4 MONDAY AND TWO ADDITIONAL HOURS ARRANGED.

11576	LECT-DISC	*11	MTUWTH	300	H G	HUBBARD

P E 408 PRINCIPLES OF KINESIOTHERAPY.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, AND PHYSIOLOGY OF EXERCISE, OR CONSENT OF INSTRUCTOR.
1 UNIT
*THREE ADDITIONAL HOURS IN EXERCISE THERAPY CLINIC 3-6 M, W, OR F.
*THE LECTURE PHASE OF THIS COURSE WILL BE COMPLETED ON JULY 20.

11584	LECT-DISC	*11-1230	MTUWTH	106	MOG ANNEX	SHELTON

P E 451 SCIENTIFIC FOUNDATIONS OF PHYSICAL FITNESS.
PREREQUISITE--UNDERGRADUATE ANATOMY AND PHYSIOLOGY, TESTS AND MEASUREMENTS.
1 UNIT
*FOUR ADDITIONAL HOURS 3-5 MONDAY & WEDNESDAY.

11592	LECT-DISC	*10	MTUWTH	209	H G	CURETON, RIBISL

P E 452 SCIENTIFIC ANALYSIS OF PHYSICAL EDUCATION ACTIVITIES.
PREREQUISITE--ANATOMY, PHYSIOLOGY, KINESIOLOGY, ELEMENTARY PHYSICS, ALGEBRA AND TRIGONOMETRY, OR CONSENT OF INSTRUCTOR.
1 UNIT
*FOUR ADDITIONAL HOURS 3-5 TUESDAY & THURSDAY.

11606	LECT-DISC	*9	MTUWTH	209	H G	CURETON, RIBISL, ROTHERMEL

P E 490 SEMINAR.
NO CREDIT
*SECTION T1 FOR STUDENTS INTERESTED PRIMARILY IN RESEARCH RELATED TO NATURAL SCIENCES.
*SECTION T2 FOR STUDENTS CONCERNED WITH RESEARCH IN HUMANITIES AND SELECTED SOCIAL SCIENCES.

11614	LECT-DISC	*T1	7-9PM	TU TH	209	H G	CURETON, RIBISL, ROTHERMEL,
11622	LECT-DISC	*T2	4-6	TU	207	H G	TREKELL,
		*T2	7-9PM	TH	209	H G	ZEIGLER

P E 493 SPECIAL PROJECTS.
1/2 OR 1 UNIT
*SECTION 2 IS AN ADMINISTRATIVE THEORY PRACTICUM MEETING FROM JUNE 20 TO JUNE 30--CREDIT 1/2 UNIT.
*SECTION 3 IS A SPORTS PSYCHOLOGY PRACTICUM MEETING FROM JULY 3 TO JULY 14--CREDIT 1/2 UNIT.
*SECTION 4 IS A SOCIOLOGY OF SPORT AND PHYSICAL EDUCATION PRACTICUM--CREDIT 1 UNIT.

11631	CONF	1	ARR				STAFF
11649	LECT-DISC	*2	1-3	MTUWTH	133	ARMORY	GROSS
		*2	8-10	F	133	ARMORY	
		*2	11-1	F	133	ARMORY	
		*2	3-5	F	133	ARMORY	
11657	LECT-DISC	*3	1-3	MTUWTH	133	ARMORY	OLSEN
11665	LECT-DISC	*4	9	MTUWTH	49	L I R	LUESCHEN

P E 495 TECHNIQUES OF RESEARCH IN HEALTH, PHYSICAL EDUCATION, AND RECREATION.
1 UNIT
*FOUR HOURS IN LABORATORY 7-9 PM MONDAY & WEDNESDAY IN 302 HUFF GYM.

11673	CONF	*11	MTUWTH	209	H G	HUBBARD, TREKELL, ROTHERMEL

P E 499 THESIS RESEARCH.
0 TO 2 UNITS

11681	CONF	ARR				STAFF

PHYSICAL EDUCATION FOR WOMEN

DEPARTMENT OFFICE 117 W GYM

FRESHMEN AND SOPHOMORES--OF THE FOUR SEMESTERS REQUIRED IN PHYSICAL EDUCATION, THE DEPARTMENT REQUIRES ONE SEMESTER OF BASIC MOVEMENT-PEW 100, WHICH WILL BE TAKEN IN THE FRESHMAN YEAR AND RECOMMENDS ONE SEMESTER OF SWIMMING--P E W 110 OR 111. ANY COURSE NOT PREVIOUSLY TAKEN MAY BE TAKEN IN THE TWO REMAINING SEMESTERS.

BASIC INSTRUCTION COURSES FOR UNDERGRADUATES

NOTE--MOST PEW BASIC INSTRUCTION COURSES HAVE BEEN ARRANGED IN SEQUENCES IN ORDER TO BETTER INSURE THE ADVANCE- ENROLLEES A COURSE OF THEIR CHOICE. THESE SEQUENCES ARE AS FOLLOWS-

SEQUENCE 1 - PEW 107, 111, 122, 124, 136
SEQUENCE 2 - PEW 104, 110, 121, 123, 132, 135
SEQUENCE 3 - PEW 120, 130, 133, 138, 145

STUDENTS REQUESTING A COURSE IN ONE OF THE ABOVE SEQUENCES WILL BE SCHEDULED IN ONE OF THE OTHER COURSES IN THAT SEQUENCE IF SECTIONS OF THE REQUESTED COURSE ARE CLOSED.

P E W 110 ELEMENTARY SWIMMING.
1 HOUR

11690	LAB	G	1	MTUWTH	116	E B POOL	SLAUGHTER

P E W 111 SUB-INTERMEDIATE SWIMMING.
1 HOUR

11703	LAB	H	2	MTUWTH	116	E B POOL	HARRIS
11711	LAB	J	3	MTUWTH	116	E B POOL	HARRIS

P E W 112 INTERMEDIATE SWIMMING.
1 HOUR

11720	LAB	H	2	MTUWTH	116	E B POOL	HARRIS
11738	LAB	J	3	MTUWTH	116	E B POOL	HARRIS

P E W 131 GOLF.
1 HOUR

11746	LAB	P	10-12	TU TH	311	W GYM	HARRIS

P E W 136 TENNIS.
1 HOUR

11754	LAB	A	8	MTUWTH	310	W GYM	SLAUGHTER
11762	LAB	B	9	MTUWTH	310	W GYM	ALY
11771	LAB	K	6PM	MTUWTH	310	W GYM	SLAUGHTER

P E W 142 BALLROOM DANCE.
1 HOUR

11789	LAB	L	7-9PM	M W	310	W GYM	MIRUS
11797	LAB	X	7-9PM	TU TH	310	W GYM	MIRUS

PROFESSIONAL COURSES FOR ADVANCED UNDERGRADUATES

P E W 220 PHYSICAL EDUCATION FOR THE CLASSROOM TEACHER.
PREREQUISITE--JUNIOR STANDING, NON-PHYSICAL EDUCATION MAJOR.
2 HOURS

11801	LAB-DISC	A	8	MTUWTHF	311	W GYM	ALY

PHYSICS

DEPARTMENT OFFICE 211 P B

ENGINEERING PHYSICS CURRICULUM--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.CURRICULUM IN PHYSICS--SEE UNDERGRADUATE STUDY CATALOG.

L.A.S.GENERAL CURRICULUM MAJOR--TWENTY HOURS IN PHYSICS, INCLUDING PHYSICS 321, 341, AND 342, AND EXCLUDING COURSES WITH NUMBERS LOWER THAN 270.

L.A.S.GENERAL CURRICULUM MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH NOT LESS THAN EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ASTRONOMY, CHEMISTRY, EDUCATION, GEOLOGY, MATHEMATICS, ZOOLOGY OR ANY ONE BRANCH OF ENGINEERING.

PHYSICS 101 AND 102 ARE RECOMMENDED TO PREMEDICAL, PREDENTAL, ARCHITECTURE, AND OTHER STUDENTS NOT SPECIALIZING IN PHYSICS, MATHEMATICS, CHEMISTRY OR ENGINEERING.

THE CALCULUS PREREQUISITE FOR CERTAIN COURSES MAY BE SATISFIED EITHER BY MATH. 132 AND 142, OR MATH. 133 AND 143.

COURSES FOR UNDERGRADUATES

PHYCS 106 GENERAL PHYSICS--MECHANICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--MATH. 122, 123--CREDIT OR REGISTRATION IN MATH, 132 OR 133.
4 HOURS

11819	LECT		10	MTUWTH	141	P B
11827	QUIZ	A	1-3	TU TH	147	P B
	LAB	A	1-3	M W	232	P B
11835	QUIZ	B	3-5	TU TH	147	P B
	LAB	B	3-5	M W	232	P B

PHYCS 107 GENERAL PHYSICS--HEAT, ELECTRICITY, AND MAGNETISM.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 106, CREDIT OR REGISTRATION IN MATH. 142 OR 143.
4 HOURS

11843	LECT	11	MTUWTH	151	P B
	QUIZ	2-4	M W	143	P B
	LAB	2-4	TU TH	234	P B

PHYCS 108 GENERAL PHYSICS--WAVE MOTION, SOUND, LIGHT AND MODERN PHYSICS.
FOR STUDENTS IN ENGINEERING, MATHEMATICS, PHYSICS, AND CHEMISTRY.
PREREQUISITE--PHYCS. 107, CREDIT OR REGISTRATION IN MATH 142 OR 143
4 HOURS

11851	LECT	8	TUWTHF	151	P B
	QUIZ	1-3	TU TH	143	P B
	LAB	1-3	W F	236	P B

COURSES FOR GRADUATES

PHYCS 497 INDIVIDUAL STUDY.
1/2 OR 1 UNIT

11860	CONF	ARR	STAFF

PHYCS 499 THESIS RESEARCH.
0 TO 2 UNITS

11878	CONF	ARR	STAFF

PHYSIOLOGY

DEPARTMENT OFFICE 524 BUR HALL

MAJOR--THE MAJOR CONSISTS OF TWENTY HOURS IN ANIMAL PHYSIOLOGY OR CLOSELY RELATED SUBJECTS LISTED IN THE LAST SENTENCE BELOW, NOT INCLUDING ELEMENTARY COURSES, AND INCLUDING PHYSL. 301 AND PHYSL 302. BECAUSE PHYSIOLOGY REQUIRES AN UNDERSTANDING OF PHYSICAL AND BIOLOGICAL SCIENCE, THE STUDENTS PROGRAM MUST INCLUDE A YEAR OF GENERAL BIOLOGY, INCLUDING BOTH ANIMAL AND PLANT BIOLOGY, A SEMESTER OF GENETICS, MATHEMATICS THROUGH ELEMENTARY CALCULUS, TWO SEMESTERS OF PHYSICS, AND FOUR SEMESTERS OF CHEMISTRY INCLUDING GENERAL, INORGANIC, ORGANIC AND QUANTITATIVE CHEMISTRY. MICROBIOLOGY, EMBRYOLOGY, HISTOLOGY, PHYSICAL CHEMISTRY AND BIOCHEMISTRY ARE RECOMMENDED STRONGLY. WITH THE APPROVAL OF THE ADVISER, UPPER DIVISION COURSES IN GENETICS, BIOCHEMISTRY, BIOPHYSICS, AND PLANT PHYSIOLOGY MAY BE COUNTED TOWARD THE MAJOR.

MINOR--TWENTY HOURS MAY BE CHOSEN FROM PHYSICS, CHEMISTRY, MICROBIOLOGY OR ZOOLOGY, PROVIDED AT LEAST 8 SEMESTER HOURS ARE OFFERED IN THE LESSER, IF TWO MINORS ARE CHOSEN.

HONORS--STUDENTS WORKING TOWARD DEPARTMENTAL DISTINCTION MUST ENROLL IN PHYSIOLOGY 290 READING COURSE, WORK WITH AN ADVISER FOR AT LEAST TWO SEMESTERS, AND TAKE A GENERAL EXAMINATION IN THE LAST SEMESTER OF THE SENIOR YEAR.

COURSES FOR UNDERGRADUATES

PHYSL 103 INTRODUCTION TO HUMAN PHYSIOLOGY.
*CREDIT IS NOT GIVEN IN PHYSL. 103 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*4 HOURS

11886	LECT		I	MTUWTH	140	BUR HALL	TAYLOR
11894	LAB-DISC	1	2-4	M W	434	BUR HALL	
		1	2-4	TU TH	436	BUR HALL	
11908	LAB-DISC	2	2-4	TU TH	434	BUR HALL	
		2	2-4	M W	436	BUR HALL	
11916	LAB-DISC	3	2-4	M W	422	BUR HALL	
		3	2-4	TU TH	444	BUR HALL	
11924	LAB-DISC	4	2-4	TU TH	422	BUR HALL	
		4	2-4	M W	444	BUR HALL	

COURSES FOR ADVANCED UNDERGRADUATES

PHYSL 290 READING COURSE.
PREREQUISITE--A COURSE IN PHYSIOLOGY, CONSENT OF INSTRUCTOR.
2 TO 4 HOURS
NOTE--THIS COURSE IS NOT LIMITED TO HONORS STUDENTS.

11932	CONF	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PHYSL 302 EXPERIMENTAL ANIMAL PHYSIOLOGY.
SAME AS ZOOL. 302.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS, AND PHYSICS, AND CHEMISTRY THROUGH ORGANIC.
5 HOURS OR 1 UNIT

11941	LECT		8	MTUWTHF	140	BUR HALL	ANDERSON
11959	LAB	1	9-12	MTUW	523	BUR HALL	
11967	LAB	2	2-5	MTUW	523	BUR HALL	

COURSES FOR GRADUATES

PHYSL 491 INDIVIDUAL TOPICS.
PREREQUISITE--APPROVAL OF DEPARTMENT.
1/2 TO 2 UNITS

11975	CONF	ARR	STAFF

PHYSL 499 THESIS RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
0 TO 2 UNITS

11983	CONF	ARR	STAFF

PLANT PATHOLOGY

DEPARTMENT OFFICE 218 M H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PL PA 300 SPECIAL PROBLEMS.
UNDERGRADUATE PREREQUISITE--MINIMUM GRADE POINT AVERAGE 3.5, NOT OPEN TO STUDENTS ON PROBATION, SENIOR STANDING, CONSENT OF THE INSTRUCTOR AND HEAD OF THE DEPARTMENT. SPECIFIC APPROVAL OF THE ASSOCIATE DEAN IS REQUIRED IN ADVANCE OF REGISTRATION FOR A SECOND AND/OR THIRD SPECIAL PROBLEM COURSE.
*MAXIMUM CREDIT EIGHT HOURS OR TWO UNITS.
*2 TO 4 HOURS, OR 1/4 TO 1 UNIT

11991	CONF	ARR	BEVER, CARTER, CHAMBERLAIN, GERDEMANN GOTTLIEB, HOOKER, JEDLINSKI, LINN, PAXTON, POWELL, SHAW, SHURTLEFF, TAYLOR, THORNBERRY

COURSES FOR GRADUATES

PL PA 499 THESIS RESEARCH.
PREREQUISITE--PL. PA. 302 OR EQUIVALENT.
0 TO 2 UNITS

12008	CONF	ARR	BEVER, CARTER, CHAMBERLAIN, GERDEMANN, GOTTLIEB, HOOKER, JEDLINSKI, LINN, POWELL, SHAW, SHURTLEFF, TAYLOR, THORNBERRY.

POLITICAL SCIENCE

DEPARTMENT OFFICE 326 L H

MAJOR--TWENTY HOURS FROM COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE. A MAJOR MAY INCLUDE THREE SEMESTER HOURS FROM THE FOLLOWING COURSES--ECONOMICS 170, 171--STATISTICS--, ECONOMICS 214--PUBLIC FINANCE--, HISTORY 345, 346, 369, 370--CONSTITUTIONAL HISTORY--, MATHEMATICS 161--STATISTICS--, PSYCHOLOGY 135--STATISTICS AND SOCIOLOGY 185--STATISTICS--. NO STUDENT ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1961, MAY OFFER MORE THAN EIGHT HOURS OF 100 LEVEL COURSES AS PART OF A POLITICAL SCIENCE MAJOR.

MINOR--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, EDUCATION, FINANCE, GEOGRAPHY, HISTORY, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, PSYCHOLOGY, SOCIAL WORK, SOCIOLOGY, AND SPEECH. ONE OF THE CURRICULA IN LATIN-AMERICA STUDIES, RUSSIAN LANGUAGE AND AREA STUDIES, OR MEDIEVAL CIVILIZATION IS ALSO ACCEPTED AS A SOLE MINOR.

STUDENTS ENTERING THE UNIVERSITY AFTER SEPTEMBER 1, 1963, MAY NOT OFFER MORE THAN EIGHT HOURS OF 100-LEVEL COURSES AS PART OF A MINOR, EXCEPT THAT MATH. 123 OR HIGHER-NUMBERED MATHEMATICS COURSES ARE NOT COUNTED IN THIS LIMITATION.

POLITICAL SCIENCE 150 AND 151 GIVE A GENERAL SURVEY OF NATIONAL, STATE AND LOCAL GOVERNMENT IN THE UNITED STATES. POLITICAL SCIENCE 191 AND 192 PRESENT A SURVEY OF THE BASIC CONCEPTS AND METHODS OF POLITICAL SCIENCE AND OF SIGNIFICANT CURRENT GOVERNMENTAL AND POLITICAL PROBLEMS AND POLICIES. UNDERGRADUATES BEGINNING THE STUDY OF POLITICAL SCIENCE ARE ADVISED TO TAKE, FIRST, EITHER POL. S. 150 OR 191. STUDENTS PLANNING TO DO ADVANCED WORK SHOULD, DURING THE SOPHOMORE YEAR, TAKE EITHER 150 OR 191 AND FOLLOW IT WITH SUCH OTHER COURSES AS COMPLETE ONE OF THE FOLLOWING COMBINATIONS--150 AND 151, 150 AND 192, 150 AND 184, 184 AND 191, OR 191 AND 192.

COURSES FOR UNDERGRADUATES

POL S 150 AMERICAN GOVERNMENT--ORGANIZATION AND POWERS.
PREREQUISITE--SOPHOMORE STANDING, OR FRESHMAN STANDING WITH DESIGNATION AS JAMES SCHOLAR, OR CONSENT OF INSTRUCTOR.
*CREDIT IS NOT GIVEN FOR BOTH POL. S. 150 AND 191.
*3 HOURS

12016	LECT-DISC	A	730-845	TUWTHF	192	L H	GARVEY
12024	LECT-DISC	D	11-12	MTUWTHF	192	L H	FARNSWORTH

COURSES FOR ADVANCED UNDERGRADUATES

POL S 291 THESIS AND HONORS COURSE.
PREREQUISITE--OPEN ONLY TO SENIORS WHOSE MAJOR IS POLITICAL SCIENCE AND WHO HAVE A GENERAL UNIVERSITY AVERAGE OF AT LEAST 4.0.
2 TO 5 HOURS

12032	CONF		ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

POL S 306 MUNICIPAL PROBLEMS.
PREREQUISITE--SENIOR STANDING OR JUNIOR STANDING WITH POL. S. 305, OR ECON. 102 AND 103, OR SIX HOURS OR POLITICAL SCIENCE.
3 HOURS, OR 1/2 OR 1 UNIT

12041	LECT-DISC		8	MTUWTHF	113	G H	HEIDORN
			4	W	113	G H	

POL S 317 THE AMERICAN FEDERAL SYSTEM.
PREREQUISITE--POL. S. 150 OR 191.
3 HOURS, OR 1/2 OR 1 UNIT

12059	LECT-DISC		9	MTUWTHF	113	G H	HEIDORN
			4	M	113	G H	

```
POL S 336     GOVERNMENTS AND POLITICS IN WESTERN CONTINENTAL EUROPE.
        3 HOURS, OR 1/2 OR 1 UNIT
      12067       LECT-DISC          10        MTUWTHF     113  G H            DAVIS
                                      4         TU         113  G H


POL S 349     GOVERNMENTS AND POLITICS OF SOUTH ASIA.
        PREREQUISITE--SIX HOURS OF POLITICAL SCIENCE OR CONSENT OF
        INSTRUCTOR.
        3 HOURS, OR 1/2 OR 1 UNIT
      12075       LECT-DISC          2-3       MTUWTHF     113  G H            COHEN


POL S 381     AMERICAN FOREIGN RELATIONS.
        PREREQUISITE--SIX HOURS OF POLITICAL SCIENCE.
        3 HOURS, OR 1/2 OR 1 UNIT
      12083       LECT-DISC           1        MTUWTHF     205  G H            FARNSWORTH
                                      4            TH      205  G H


POL S 393     HISTORY OF POLITICAL THEORY.
        3 HOURS, OR 1/2 OR 1 UNIT
      12091       LECT-DISC          11-12     MTUWTHF     143  A H            DAVIS

                                COURSES FOR GRADUATES


POL S 447     PROBLEMS OF ASIAN POLITICS AND GOVERNMENT.
        PREREQUISITE--POL. S. 441 OR EQUIVALENT.
        *STUDENTS MAY ACCUMULATE 3 UNITS.
        *1 UNIT
      12105       LECT-DISC           3        MTUWTH      305  G H            COHEN


POL S 450     CONTEMPORARY GOVERNMENTAL PROBLEMS.
        *STUDENTS MAY ACCUMULATE THREE UNITS.
        *1 UNIT
      12113       LECT-DISC          10-12      TU TH      398  L H            GARVEY


POL S 493     RESEARCH IN SELECTED TOPICS.
        1/2 TO 3 UNITS
      12121       CONF              ARR                                         STAFF


POL S 499     THESIS RESEARCH.
        0 TO 2 UNITS
      12130       CONF              ARR                                         STAFF



                                     PORTUGUESE

              DEPARTMENT OFFICE                          224 L H

                                COURSES FOR UNDERGRADUATES


PORT  111     ELEMENTARY PORTUGUESE.
        FOR STUDENTS WHO HAVE NO CREDIT IN PORTUGUESE.
        8 HOURS
        *FOUR ADDITIONAL LAB HOURS TO BE ARRANGED.
      12148       LECT-DISC         *8-10      MTUWTH      141  A H
                                     1-3       MTUWTH      141  A H

                                COURSES FOR GRADUATES


PORT  491     SPECIAL TOPICS IN PORTUGUESE.
        1/2 OR 1 UNIT
      12156       CONF              ARR                                         ALLEN


PORT  499     THESIS RESEARCH.
        0 TO 2 1/2 UNITS
      12164       CONF              ARR                                         ALLEN
```

PSYCHOLOGY

DEPARTMENT OFFICE 309 G H

MAJOR--THREE TYPES OF MAJOR PROGRAMS ARE OFFERED--THE GENERAL MAJOR, SUITABLE FOR STUDENTS INTERESTED PRIMARILY IN GENERAL LIBERAL EDUCATION-THE APPLIED PSYCHOLOGY MAJOR, DESIGNED FOR STUDENTS INTERESTED IN VOCATIONAL PREPARATION INVOLVING A MINIMUM OF GRADUATE TRAINING-AND THE HONORS MAJOR, DESIGNED MAINLY TO PREPARE STUDENTS FOR GRADUATE TRAINING LEADING TO THE DOCTORATE IN PSYCHOLOGY.

THE GENERAL MAJOR MUST COMPLETE 20 HOURS IN PSYCHOLOGY BEYOND PSYCHOLOGY 100 OR 103. PSYCHOLOGY 135 IS REQUIRED IN THIS PROGRAM AND SHOULD BE TAKEN AS SOON AS POSSIBLE AFTER THE INTRODUCTORY COURSE.

THE APPLIED PSYCHOLOGY MAJOR CAN SPECIALIZE IN ANY ONE OF FOUR DIFFERENT OPTIONS, NAMELY, ENGINEERING PSYCHOLOGY, PERSONNEL PSYCHOLOGY, MEASUREMENT PSYCHOLOGY, AND SCHOOL PSYCHOLOGY. THE REQUIREMENTS FOR ENGINEERING PSYCHOLOGY ARE AS FOLLOWS-PSYCHOLOGY 235, 245, 356, 358, 12 HOURS SELECTED FROM PSYCHOLOGY 330, 331, 332, 390, MATHEMATICS 195, PHYSIOLOGY 304. THE REQUIREMENTS FOR PERSONNEL PSYCHOLOGY ARE AS FOLLOWS- PSYCHOLOGY 235, 245, 332, 355, 390-6 HOURS SELECTED FROM PSYCHOLOGY 201, 250, 256, 356, 357, 358,-6 HOURS SELECTED FROM ACCOUNTING 101-105, I. ADM. 201, ECONOMICS 102, 103, 300, INDUSTRIAL ENGINEERING 287, SOCIOLOGY 300,-MATHEMATICS 195. THE REQUIREMENTS FOR PSYCHOLOGICAL MEASUREMENT ARE AS FOLLOWS-PSYCHOLOGY 235, 245, 390-8 HOURS SELECTED FROM PSYCHOLOGY 330, 331, 332-MATHEMATICS 195 AND 315-6 HOURS SELECTED FROM PSYCHOLOGY 201, 250, 256, 355, EDUCATION 211, 325. THE REQUIREMENTS FOR SCHOOL PSYCHOLOGY ARE AS FOLLOWS-PSYCHOLOGY 201, 216, 235, 250, 311, 331, 338, 365, 390-EUDCATION 201, 211, 312, 316, 318, 322, AND 324.

THE HONORS MAJOR MUST COMPLETE 20 HOURS IN PSYCHOLOGY BEYOND PSYCHOLOGY 100 OR 103. PSYCHOLOGY 235 AND 8 HOURS OF WORK IN LABORATORY COURSES AT THE 300 LEVEL ARE REQUIRED IN THIS PROGRAM. HONORS MAJORS SHOULD ALSO REGISTER IN SPECIAL HONORS SECTIONS WHEN AVAILABLE. THESE MAJORS ARE ALSO URGED TO TAKE MATHEMATICS THROUGH CALCULUS, AT LEAST A FULL-YEAR LABORATORY COURSE IN ANOTHER SCIENCE, AND AT LEAST TWO YEARS OF FRENCH, GERMAN, OR RUSSIAN, WITH TWO YEARS IN EACH OF TWO DESIRABLE.

MINOR--FOR THE GENERAL MAJOR, 20 HOURS IN ANY SUBJECT MATTER ACCEPTED FOR CREDIT BY THE COLLEGE OF LIBERAL ARTS AND SCIENCES-IF TWO ARE CHOSEN THERE MUST BE A MINIMUM OF 8 HOURS IN EACH. IN ADDITION, IF FOREIGN LANGUAGE CREDIT IS OFFERED, IT MUST BE BEYOND THAT REQUIRED BY THE COLLEGE FOR GRADUATION.

FOR THE APPLIED PSYCHOLOGY MAJOR, THE MINOR MUST BE SELECTED IN ACCORDANCE WITH THE MAJOR OPTION. FOR ENGINEERING PSYCHOLOGY, A MINOR OR MINORS OF 20 HOURS SELECTED FROM MATHEMATICS, ENGINEERING, PHYSICS, AND PHYSIOLOGY. FOR PERSONNEL PSYCHOLOGY, A MINOR OR MINORS OF 20 HOURS SELECTED FROM MATHEMATICS, ANTHROPOLOGY, ECONOMICS, POLITICAL SCIENCE, AND SOCIOLOGY. FOR PSYCHOLOGICAL MEASUREMENT, A MINOR OF 20 HOURS IN MATHEMATICS. FOR SCHOOL PSYCHOLOGY, A MINOR OF 20 HOURS IN EDUCATION.

FOR THE HONORS MAJOR, 20 HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, PROVIDING THAT IF TWO ARE CHOSEN, THERE MUST BE A MINIMUM OF 8 HOURS IN EACH--ANTHROPOLOGY, ANY BIOLOGICAL SCIENCE, CHEMISTRY, ECONOMICS, EDUCATION, ENGINEERING, LINGUISTICS, MATHEMATICS, PHYSICS, POLITICAL SCIENCE, AND SOCIOLOGY.

DEPARTMENTAL DISTINCTION--THE MINIMUM REQUIREMENTS FOR GRADUATION WITH DEPARTMENTAL DISTINCTION IN PSYCHOLOGY ARE AS FOLLOWS--ELIGIBILITY FOR COLLEGE HONORS, SATISFACTORY COMPLETION OF THE COURSES REQUIRED IN THE HONORS MAJOR PROGRAM, AND FOUR HOURS OF CREDIT IN PSYCHOLOGY 291-292, INCLUDING AN ACCEPTABLE THESIS.

COURSES FOR UNDERGRADUATES

PSYCH 100 INTRODUCTION TO PSYCHOLOGY.
NOT OPEN TO STUDENTS ELECTING PSYCH. 103 OR D.G.S. 171.
REQUIRES FIVE HOURS OF PARTICIPATION IN LABORATORY EXPERIMENTS
4 HOURS
*STUDENTS REGISTERED IN LECTURE A MUST ELECT AN A QUIZ SECTION.
STUDENTS REGISTERED IN LECTURE B MUST ELECT A B QUIZ SECTION.

12172	LECT	*A	9	MTUWTHFS	100	G	H	DULANY
12199	QUIZ	A1	8	TU TH	304	G	H	
12202	QUIZ	A2	10	TU TH	304	G	H	
12211	QUIZ	A3	11	TU TH	304	G	H	
12229	QUIZ	A4	11	M W	304	G	H	
12181	LECT	*B	11	MTUWTHFS	100	G	H	DULANY
12237	QUIZ	B1	8	M W	304	G	H	
12245	QUIZ	B2	9	M W	304	G	H	
12253	QUIZ	B3	10	M W	304	G	H	
12261	QUIZ	B4	9	TU TH	304	G	H	

PSYCH 103 HUMAN BEHAVIOR.
NOT OPEN TO STUDENTS ELECTING PSYCH. 100 OR D.G.S. 171.
4 HOURS

12270	LECT	A	8	MTUWTH	307	G	H	MEAD
	LAB	A	9-11	MTUWTH	402	G	H	

COURSES FOR ADVANCED UNDERGRADUATES

PSYCH 216 CHILD PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103.
3 HOURS

12288	LECT		10	MTUWTHFS	307	G	H	LES COHEN

PSYCH 245 INDUSTRIAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 100 OR 103 AND A COURSE IN STATISTICS.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 145 AND 245.
*3 HOURS

12296	LECT		11	MTUWTHFS	307	G	H	WHIMBEY

PSYCH 250 PSYCHOLOGY OF PERSONALITY.
PREREQUISITE--PSYCH. 100 OR 103.
*CREDIT IS NOT GIVEN FOR BOTH PSYCH. 150 AND 250.
*3 HOURS

12300	LECT		9	MTUWTHFS	307	G	H	ROSE

PSYCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE POINT AVERAGE OF 4.0 AND WRITTEN CONSENT OF THE INSTRUCTOR--IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

12318	CONF		ARR					STAFF

PSYCH 294 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF PSYCHOLOGY, A GRADE POINT AVERAGE OF 4.0 AND WRITTEN CONSENT OF THE INSTRUCTOR, IN EXCEPTIONAL CASES, UPON RECOMMENDATION OF THE INSTRUCTOR AND APPROVAL BY THE HEAD OF THE DEPARTMENT, STUDENTS MAY BE ADMITTED WITH A GRADE-POINT AVERAGE OF 3.75.
2 TO 4 HOURS

12326	CONF		ARR					STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

PSYCH 338 ABNORMAL PSYCHOLOGY.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY, JUNIOR STANDING EXCEPT FOR THOSE IN THE PREMEDICAL CURRICULUM WHO MAY TAKE THE COURSE AS SECOND SEMESTER SOPHOMORES WITH FOUR HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

12334	LECT		10-12	TUWTH	319	G	H	ROSE

PSYCH 348 THE PSYCHOLOGY OF LEARNING.
PREREQUISITE--SIX HOURS OF PSYCHOLOGY.
3 HOURS, OR 1/2 OR 1 UNIT

12342	LECT	8-10	TUWTH	319	G H	BATCHELDER

PSYCH 361 ADVANCED DEVELOPMENTAL PSYCHOLOGY.
PREREQUISITE--PSYCH. 216, 217 AND A COURSE IN STATISTICS.
3 HOURS, OR 1/2 TO 1 UNIT

12351	LECT	1-3	TUWTH	319	G H	LES COHEN

COURSES FOR GRADUATES

NOTE--THE PREREQUISITES STATED APPLY TO GRADUATE MAJORS IN PSYCHOLOGY. STUDENTS MINORING IN PSYCHOLOGY MAY, BY SPECIAL PERMISSION OF INSTRUCTORS, ENROLL IN CERTAIN OF THESE COURSES WITHOUT HAVING MET ALL OF THE PREREQUISITES.

PSYCH 402 SYSTEMATIC PSYCHOLOGY.
PREREQUISITE--TWELVE HOURS OF PSYCHOLOGY.
1 UNIT

12369	LECT	10-12	TU TH	445	G H	DULANY

PSYCH 408 DESIGN OF EXPERIMENTS IN PSYCHOLOGY.
PREREQUISITE--PSYCH. 307.
1 UNIT

12377	LECT	8-10	M W	445	G H	KAPPAUF

PSYCH 490 INDIVIDUAL RESEARCH.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

12385	CONF		ARR			STAFF

PSYCH 499 THESIS RESEARCH.
0 TO 2 UNITS

12393	CONF	A	ARR			STAFF
12407	CONF	B	ARR			STAFF

RADIO AND TELEVISION

DEPARTMENT OFFICE 1218 G H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

R TV 366 ADVANCED RADIO AND TELEVISION PRACTICES, I.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT

12415	CONF		ARR	232	G H	LIPPOLD

R TV 367 ADVANCED RADIO AND TELEVISION PRACTICES, II.
PREREQUISITE--ALL COURSES IN AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
2 HOURS OR 1/2 UNIT

12423	CONF		ARR	232	G H	LIPPOLD

COURSES FOR GRADUATES

R TV 450 SPECIAL PROBLEMS IN TELEVISION.
PREREQUISITE--A TELEVISION COURSE IN THE AREA OF SPECIALIZATION, CONSENT OF INSTRUCTOR.
1 OR 2 UNITS

12431	CONF		ARR	232	G H	LIPPOLD

R TV 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN RADIO AND TELEVISION.
1 OR 2 UNITS

12440	CONF		ARR			STAFF

RECREATION AND MUNICIPAL PARK ADMINISTRATION

DEPARTMENT OFFICE 104 HUFF GYM

COURSES FOR ADVANCED UNDERGRADUATES

REC 278 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
2 OR 3 HOURS
12458 CONF ARR GARRET
PARKER
FRYE

REC 279 RECREATION FIELD WORK.
PREREQUISITE--SENIOR STANDING OR CONSENT OF INSTRUCTOR.
2 OR 3 HOURS
12466 CONF ARR GARRET
PARKER
FRYE

COURSES FOR GRADUATES

REC 401 FOUNDATIONS OF RECREATION.
PREREQUISITE--REC. 176 OR EQUIVALENT.
1 UNIT
12474 LECT-DISC 8-10 M W 133 ARMORY SAPORA

REC 402 RECREATION ADMINISTRATION.
PREREQUISITE--BASIC COURSES IN THE ORGANIZATION OF RECREATION OR EQUIVALENT.
1 UNIT
12482 LECT-DISC 8-10 TU TH 133 ARMORY STOREY

REC 493 SPECIAL PROJECTS.
PREREQUISITE--REC. 403 OR EQUIVALENT, RECREATION MAJOR.
1/2 TO 2 UNITS
12491 CONF ARR BISHOP
SAPORA
STOREY

REC 499 THESIS RESEARCH.
0 TO 4 UNITS
12504 CONF ARR STOREY
BISHOP
SAPORA

RHETORIC
INCLUDING RHETORIC AND COMPOSITION, ENGLISH AS A SECOND LANGUAGE, AND BUSINESS AND TECHNICAL WRITING

RHETORIC AND COMPOSITION

DEPARTMENT OFFICE 100 E B

MAJOR--TWENTY HOURS IN ENGLISH, INCLUDING TEN HOURS IN LITERATURE -CHOSEN FROM ENGLISH 131 AND ENGLISH COURSES AT THE 200 OR 300 LEVEL-AND TEN HOURS OF WRITING-CHOSEN FROM RHETORIC 143, 144, 205, 206, 227, 246, 255, 263, AND 300-. AT LEAST ONE COURSE IN EXPOSITORY WRITING-RHETORIC 143, 227-IS REQUIRED. WITH AN ADVISORS PERMISSIONS, EITHER SPEECH 363 OR JOURNALISM 326 MAY BE COUNTED TOWARD THE MAJOR. A STUDENT WHO PLANS TO ATTEND GRADUATE SCHOOL SHOULD TAKE INTO ACCOUNT THE ENTRANCE REQUIREMENTS OF THE GRADUATE DEPARTMENT HE WISHES TO ENTER.

MINOR--AN APPROVED SEQUENCE OF TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS WITH AT LEAST EIGHT HOURS IN THE LESSER IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, ANY FOREIGN LANGUAGE, HISTORY, HUMANITIES, LIBRARY SCIENCE, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY, AND SPEECH--OR AN APPROVED SEQUENCE IN HISTORY OF ARCHITECTURE, HISTORY OF ART, OR MUSIC--NOT INCLUDING APPLIED MUSIC--COMBINED WITH ANY ONE OF THE ABOVE SUBJECTS. THE PROGRAM IN ASIAN STUDIES IS ACCEPTED AS A SOLE MINOR. WITH THE WRITTEN APPROVAL OF THE DEPARTMENT ADVISER, OTHER SUBJECTS MAY BE SUBSTITUTED. NO LANGUAGE COURSES WILL SATISFY MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJOR OF THEIR DEPARTMENT EXCEPT FRENCH 103, 104, GERMAN 103, 104, LATIN 101, 102, 103, PORTUGUESE 103, 104, RUSSIAN 103, 104, AND SPANISH 103, 104. FOREIGN LANGUAGE DEPARTMENT COURSES PRESENTING FOREIGN LITERATURE IN TRANSLATION ARE ALSO EXCLUDED. STUDENTS INTENDING TO DO GRADUATE WORK SHOULD CONSULT THE LANGUAGE REQUIREMENTS OF THE GRADUATE COLLEGE AND THE ENGLISH DEPARTMENT WHEN THEY PLAN THEIR MINOR PROGRAMS.

DEPARTMENTAL HONORS PROGRAM AND DISTINCTION--A STUDENT MAJORING IN RHETORIC AND COMPOSITION WHO MEETS THE UNIVERSITY GRADE-POINT REQUIREMENT -4.0 OR HIGHER- MAY EARN DISTINCTION ONLY BY COMPLETING NINE HOURS OF HONORS WORK IN ADDITION TO THE MINIMUM NUMBER OF HOURS REQUIRED FOR HIS MAJOR. THIS ADDITIONAL CREDIT MUST INVOLVE A SIGNIFICANT WRITING PROJECT IN RHETORIC 255, THE COMPLETION OF ENGLISH 297, AND ANY TWO OF THE FOLLOWING THREE HONORS COURSES ENGLISH 197, 295, 296. THE LEVEL OF DISTINCTION -DISTINCTION, HIGH DISTINCTION, HIGHEST DISTINCTION- IS DETERMINED BY THE INSTRUCTORS IN CHARGE OF THE COURSES AND THE HONORS COMMITTEE. TO RECEIVE HIGH DISTINCTION, HOWEVER, A STUDENT MUST HAVE A MINIMUM GRADE-POINT AVERAGE OF 4.5 IN ALL COURSES THAT COUNT TOWARD HIS MAJOR--TO RECEIVE HIGHEST DISTINCTION, HIS AVERAGE IN THESE COURSES MUST BE AT LEAST 4.75. IF, IN THE OPINION OF HIS INSTRUCTORS AND THE COMMITTEE, A CANDIDATE HAS NOT EARNED DISTINCTION, HE MAY STILL RECEIVE CREDIT FOR THE COURSE.

COURSES FOR UNDERGRADUATES

RHET 101 FRESHMAN RHETORIC AND COMPOSITION.
3 HOURS

12512	LECT-DISC	A	8	MTUWTHF	152	ADMIN
		A	12	M	152	ADMIN
12521	LECT-DISC	B	9	MTUWTHF	194	L H
		B	12	TU	194	L H
12539	LECT-DISC	C	10	MTUWTHF	194	L H
		C	12	W	194	L H

RHET 102 FRESHMAN RHETORIC AND COMPOSITION.
PREREQUISITE--RHET. 101.
3 HOURS

12547	LECT-DISC	A	8	MTUWTHF	108	E B
		A	12	M	108	E B
12555	LECT-DISC	C	10	MTUWTHF	108	E B
		C	12	W	108	E B
12563	LECT-DISC	D	11	MTUWTHF	194	L H
		D	12	TH	194	L H

RHET 133 PRINCIPLES OF COMPOSITION.
PREREQUISITE--RHET. 102 OR EQUIVALENT.
*CREDIT IS NOT GIVEN FOR RHET. 133 IN ADDITION TO RHET. 143.
*3 HOURS

12571	LECT-DISC	B	9	MTUWTHF	140	ADMIN	LAMAR
		B	12	TU	140	ADMIN	

RHET 144 NARRATIVE WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT, SOPHOMORE STANDING.
3 HOURS

12580	LECT-DISC	D	11	MTUWTHF	210A	E B
		D	12	TH	210A	E B

COURSES FOR ADVANCED UNDERGRADUATES

RHET 200 REMEDIAL WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH.
3 HOURS

12598	LECT-DISC	B	9	MTUWTHF	209	E B
		B	12	TU	209	E B
12601	LECT-DISC	C	10	MTUWTHF	209	E B
		C	12	W	209	E B

RHET 246 MODERN ENGLISH GRAMMAR.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

12610	LECT-DISC	D	11	MTUWTHF	209	E B	STEWART
		D	12	TH	209	E B	

ENGLISH AS A SECOND LANGUAGE

DEPARTMENT OFFICE 317 E B

NOTE--NO STUDENT, WITH THE EXCEPTION OF THOSE WHO RECEIVED A SCORE OF 90 OR ABOVE ON THE OVERSEAS TEST, IS PERMITTED TO REGISTER FOR ANY COURSE IN REMEDIAL RHETORIC-109, 110, AND 111-OR SERVICE RHETORIC-114, 115, 201, 400, AND 401-IN ENGLISH AS A SECOND LANGUAGE UNTIL HE HAS TAKEN THE PLACEMENT TEST IN ENGLISH AS A SECOND LANGUAGE. AUDITORS ARE NOT PERMITTED. RHETORIC 114 AND 115 FULFILL GRADUATION REQUIREMENTS IN RHETORIC. STUDENTS MAY BE REQUIRED TO TAKE REMEDIAL COURSES BEFORE THEY ARE PERMITTED TO TAKE RHET. 114. ADVISERS SHOULD CONSULT THE UNDERGRADUATE STUDY BULLETIN UNDER THE SECTION ENTITLED--GENERAL REQUIREMENTS FOR GRADUATION-ENGLISH--FOR THE DEFINITION OF A FOREIGN STUDENT.

COURSES FOR UNDERGRADUATES

RHET 109 ENGLISH AS A SECOND LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS. RECOMMENDATION FROM ILLINOIS PLACEMENT TEST.
NO CREDIT

12628	LECT-DISC	C	10-12	MTUWTHFS	154	ADMIN

RHET 110 ENGLISH AS A SECOND LANGUAGE.
PREREQUISITE--READING KNOWLEDGE OF ENGLISH AND ABILITY TO UNDERSTAND SIMPLE INSTRUCTIONS. RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
NO CREDIT

12636	LECT-DISC	B	9	MTUWTHFS	154	ADMIN

RHET 111 ENGLISH AS A SECOND LANGUAGE.
PREREQUISITE--RHET. 109, RECOMMENDATION FROM ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
NO CREDIT

12644	LECT-DISC	C	10-12	MTUWTHFS	217	G H

RHET 114 COMPOSITION FOR UNDERGRADUATE FOREIGN STUDENTS.
PREREQUISITE--RHET. 111, RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

12652	LECT-DISC	A	8	MTUWTHFS	154	ADMIN	

RHET 115 COMPOSITION FOR UNDERGRADUATE FOREIGN STUDENTS.
PREREQUISITE--RHET. 114 AND/OR RECOMMENDATION FROM OVERSEAS TEST OR ILLINOIS PLACEMENT TEST, OR CONSENT OF INSTRUCTOR.
*FOREIGN STUDENTS RECEIVE 3 HOURS CREDIT,
*AMERICAN STUDENTS WITH FOREIGN LANGUAGE BACKGROUND RECEIVE NO CREDIT.
*0 OR 3 HOURS

12661	LECT-DISC	C	10	MTUWTHFS	137	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES

RHET 201 COMPOSITION FOR UNDERGRADUATE FOREIGN STUDENTS.
PREREQUISITE--RHET. 114 AND 115 AND FAILURE ON THE QUALIFYING EXAMINATION IN ENGLISH FOR FOREIGN STUDENTS.
3 HOURS

12679	LECT-DISC	B	9	MTUWTHFS	137	ADMIN	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RHET 392 SEMINAR ON THE PROBLEMS OF TEACHING ENGLISH IN SOUTH ASIA.
SAME AS ENGL. AND LING. 392.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT

12687	LECT-DISC	B	9	MTUWTHFS	217	G H	ASTON

COURSES FOR GRADUATES

RHET 400 VERBAL COMMUNICATION IN ENGLISH AS A SECOND LANUAGE FOR GRADUATE FOREIGN STUDENTS, I.
PREREQUISITE--GRADUATE STANDING AND RHET. 111, OR CONSENT OF INSTRUCTOR.
3 HOURS

12695	LECT-DISC	A	8	MTUWTHFS	137	ADMIN	

BUSINESS AND TECHNICAL WRITING

DEPARTMENT OFFICE 3178 D K H

COURSES FOR ADVANCED UNDERGRADUATES

RHET 251 BUSINESS WRITING.
PREREQUISITE--RHET. 101 AND 102, OR EQUIVALENT.
3 HOURS

12709	LECT-DISC	B	9	MTUWTHF	126	COM W	MAGUIRE
		B	2	TU	126	COM W	MAGUIRE

RHET 272 REPORT WRITING.
PREREQUISITE--RHET. 102 OR EQUIVALENT.
2 HOURS

12717	LECT-DISC	E	1	MTUWTH	126	COM W	CHAPDU

RUSSIAN

SLAVIC LANGUAGES AND LITERATURES
DEPARTMENT OFFICE 260 L H

MAJOR--TWENTY HOURS OF RUSSIAN EXCLUDING RUSSIAN 101, 102, 103, AND 104, AND INCLUDING RUSSIAN 201, 202, 211, 212, 213, AND AT LEAST EIGHT HOURS FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES, A MINIMUM OF SIX HOURS IN RUSSIAN 321, 322, 323, 324, 325, AND 332, AND A MINIMUM OF TWO AND A MAXIMUM OF SIX HOURS IN RUSSIAN 309, 310, 312, 331.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ENGLISH--EXCLUDING RHET. 101 AND 102--, FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LIBRARY SCIENCE, PHILOSOPHY, POLITICAL SCIENCE, PORTUGUESE, SPANISH. THE FIRST SEMESTER OF ANY FOREIGN LANGUAGE--FR. 101, GER. 101, GRK. 101, ITAL. 101, LAT. 101, PORT. 101, SPAN. 101--MAY NOT BE COUNTED TOWARD A MINOR IN THAT SUBJECT. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES--WITH THE EXCEPTION OF COURSES IN RUSSIAN--IS ALSO ACCEPTED AS A SOLE MINOR.

COURSES FOR UNDERGRADUATES

RUSS 101 FIRST-YEAR RUSSIAN, I.
FOR STUDENTS WHO HAVE NO CREDIT IN RUSSIAN.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR RUSS. 101 WITHOUT RUSS. 102.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.

12725	LECT-DISC	A	8-10	MTUWTH	270	L H	KLEIN

RUSS 112 INTENSIVE SECOND-YEAR RUSSIAN.
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS OF WORK WEEKLY IN THE LANGUAGE LABORATORY.
PREREQUISITE--RUSS. 111 OR 102.
8 HOURS

12733	LECT-DISC	C	10-12	MTUWTH	207	G H	BILOKUR
12741	LECT-DISC	E	1-3	MTUWTH	302	L H	BILOKUR

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

RUSS 321 READINGS IN RUSSIAN LITERATURE--PUSHKIN, LERMONTOV, GOGOL.
PREREQUISITE--RUSS. 201 AND 202 OR CONSENT OF INSTRUCTOR.
3 HOURS OR 3/4 UNIT

12750	LECT-DISC	C	10-12	M W F	240	L H	

RUSS 326 MASTERPIECES OF RUSSIAN LITERATURE.
PREREQUISITE--RUSS. 201 AND RUSS. 202.
3 HOURS OR 3/4 UNIT

12768	LECT-DISC	E	1-3	M W F	207	G H	

RUSS 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., GER., AND SPAN. 382.
PREREQUISITE--THREE YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS OR 1/2 UNIT

12776	LECT-DISC		10	MTUWTH	210	L H	MYERS

COURSES FOR GRADUATES

RUSS 400 BEGINNING RUSSIAN FOR GRADUATE STUDENTS.
4 HOURS

12784	LECT-DISC	A	8-10	MTUWTH	207	G H	STAFF

RUSS 401 READINGS IN RUSSIAN FOR GRADUATE STUDENTS.
PREREQUISITE--RUSS. 400 OR EQUIVALENT.
4 HOURS
12792 LECT-DISC C 10-12 MTUWTH 270 L H STAFF

RUSS 491 INDIVIDUAL TOPICS.
PREREQUISITE--GRADUATE STANDING WITH A MAJOR OR MINOR IN RUSSIAN.
1/4 TO 2 UNITS
TOPIC--POLISH LITERATURE.
12806 CONF ARR PACHMUSS

CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES

DEPARTMENT OFFICE 1207 W OREGON

STUDENTS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

MAJOR--STUDENTS WHO ELECT RUSSIAN LANGUAGE AND AREA STUDIES AS A MAJOR MUST,
1-COMPLETE THE PRESCRIBED AND GENERAL EDUCATION SEQUENCES REQUIRED IN THE SCIENCES AND LETTERS CURRICULUM.
2-COMPLETE AT LEAST TWENTY SEMESTER HOURS OF RUSSIAN LANGUAGE COURSES, IN ADDITION TO RUSS. 101-102, OR DEMONSTRATE EQUIVALENT PROFICIENCY.
3-COMPLETE A MAJOR CONSISTING OF AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST FOUR DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. COURSES USED FOR MAJOR OR MINOR CREDIT OUTSIDE THE PROGRAM OF RUSSIAN LANGUAGE AND AREA STUDIES MAY NOT COUNT AS PART OF THIS TWENTY HOURS.

ANTH. 381, 382	POL. S. 335, 383
ECON. 357	RUSS. 309, 310, 312, 322,
GEOG. 353	323, 324, 325, 332, 333
HIST. 219, 220, 320, 321,	SOC. 350
325, 326, 327, 328	UKR. 396, 398

4-COMPLETE A MINOR OF TWENTY HOURS, EXCLUDING COURSES OPEN TO FRESHMEN, IN ONE OR TWO DEPARTMENTS. IF TWO ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE TAKEN IN EACH. COURSE IN THE RUSSIAN LANGUAGE MAY, WITH THE APPROVAL OF THE CENTER DIRECTOR, CONSTITUTE ALL OR PART OF THIS MINOR.

RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR--A MINOR IN RUSSIAN LANGUAGE AND AREA STUDIES, DESIGNED TO ACCOMPANY A MAJOR IN ANY DEPARTMENT, REQUIRES AT LEAST TWENTY SEMESTER HOURS DISTRIBUTED AMONG AT LEAST THREE DEPARTMENTS AND CHOSEN FROM THE COURSES LISTED BELOW. IT ALSO REQUIRES A KNOWLEDGE OF RUSSIAN EQUIVALENT AT LEAST TO THAT NORMALLY ATTAINED AFTER RUSS. 101-102.

ANTH. 381, 382	POL. S. 335, 383
ECON. 357	RUSS. 309, 310, 312, 322,
GEOG. 353	323, 324, 325, 332, 333
HIST. 219, 220, 320, 321,	SOC. 350
325, 326, 327, 328	UKR. 396, 398

GRADUATE MINORS IN RUSSIAN LANGUAGE AND AREA STUDIES

MINOR FOR THE MASTERS DEGREE--A CANDIDATE FOR THE MASTERS DEGREE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST EARN AT LEAST TWO UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN BELOW. THE COURSES CHOSEN MUST BE IN AT LEAST TWO DEPARTMENTS.

ANTH. 381, 382	POL. S. 335, 383, 435, 440
ECON. 357, 457	RUSS. 309, 310, 312, 321, 322
	323, 324, 325, 332, 333,
GEOG. 353, 495	405, 410, 412, 413, 415,
	416, 417, 421, 423
HIST. 320, 321, 325, 326,	SOC. 350, 450
327, 328, 427	UKR. 396, 398

LAW. 369, 371
LIB. S. 433

MINOR FOR THE PH.D. DEGREE--A DOCTORAL CANDIDATE WHO ELECTS RUSSIAN LANGUAGE AND AREA STUDIES AS A MINOR MUST DEMONSTRATE A READING COMMAND OF RUSSIAN AS TESTED BY EXAMINATION OR BY COMPLETION OF RUSSIAN 104 OR 401 WITH A GRADE OF A OR B, AND IN ADDITION MUST EARN AT LEAST FOUR UNITS OF GRADUATE CREDIT IN COURSES CHOSEN FROM THE LIST GIVEN JUST ABOVE. THE FOUR UNITS MUST BE DISTRIBUTED AMONG AT LEAST TWO DEPARTMENTS OUTSIDE OF, AND MAY AT THE SAME TIME INCLUDE UP TO ONE UNIT FROM WITHIN, THE DEPARTMENT OFFERING THE CANDIDATES MAJOR.

CERTIFICATE OF GRADUATE SPECIALIZATION IN RUSSIAN LANGUAGE AND AREA STUDIES

THIS CERTIFICATE IS AWARDED BY THE GRADUATE COLLEGE AND THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES. IT IS FOR PERSONS WITH THE BACCALAUREATE WHO ARE ENROLLED IN ADVANCED STUDIES IN ANY DISCIPLINE AND WHO WISH AT THE SAME TIME TO GAIN A KNOWLEDGE OF THE RUSSIAN AREA AND LANGUAGE. THE REQUIREMENTS ARE--1--A GOOD COMMAND OF WRITTEN AND SPOKEN RUSSIAN, AS DETERMINED BY SPECIAL EXAMINATIONS. 2--AT LEAST SIX GRADUATE UNITS RELATING TO RUSSIAN, DISTRIBUTED AMONG AT LEAST THREE OF THE DEPARTMENTS REPRESENTED IN THE PROGRAM--ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, HISTORY, LAW, LIBRARY SCIENCE, POLITICAL SCIENCE, RUSSIAN AND SOCIOLOGY--IN ADDITION TO THE STUDENTS OWN MAJOR DEPARTMENT. FOR COURSES, SEE ABOVE. IF THE STUDENTS MAJOR DEPARTMENT IS ONE OF THESE NINE HE MAY COUNT, AS PART OF HIS SIX UNITS, UP TO ONE UNIT FROM WITHIN HIS MAJOR DEPARTMENT.
3--A SPECIAL ESSAY BASED LARGELY ON RUSSIAN SOURCES AND TO BE, AT THE MINIMUM, OF THE STANDARD NORMALLY REQUIRED IN A MASTERS THESIS. THE STUDENT MAY SUBMIT, IN FULFILLMENT OF THIS REQUIREMENT, A COPY OF HIS MASTERS THESIS OR DOCTORAL DISSERTATION.

THE ADVISER FOR THE GRADUATE MINORS AND THE CERTIFICATE IS PROFESSOR RALPH T. FISHER, JR., DIRECTOR OF THE CENTER FOR LANGUAGE AND AREA STUDIES, 1207 WEST OREGON.

STUDENTS IN OTHER COLLEGES

STUDENTS IN OTHER COLLEGES AND SCHOOLS OF THE UNIVERSITY WHO DESIRE A KNOWLEDGE OF THE RUSSIAN AREA ARE INVITED TO CONSULT, EITHER DIRECTLY OR THROUGH THEIR ADVISERS, WITH THE DIRECTOR OF THE CENTER FOR RUSSIAN LANGUAGE AND AREA STUDIES IN ORDER TO DEVELOP PROGRAMS SUITED TO THEIR INDIVIDUAL NEEDS. SUCH PROGRAMS MAY IN SOME CASES BE ADOPTED AS A SPECIAL MINOR.

BELOW ARE LISTED COURSES APPROVED FOR THE RUSSIAN LANGUAGE AND AREA STUDIES PROGRAMS WHICH ARE BEING OFFERED THIS TERM. FOR FULL COURSE DESCRIPTIONS, CONSULT THE ENTRIES OF THE APPROPRIATE DEPARTMENTS.
RUSS. 321, 322

SAFETY EDUCATION

DEPARTMENT OFFICE 114 HUFF GYM

COURSES FOR GRADUATES

S ED 402 PROBLEMS IN SAFETY EDUCATION.
1 UNIT
12814 LECT-DISC C 10 MTUWTH 133 ARMORY FLORIO

SANSKRIT

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES

SANSK 207 ELEMENTARY SANSKRIT.
6 HOURS
MEETS JUNE 20 THROUGH AUGUST 25.

12822	LECT-DISC	8-10	MTUWTH	169	E E B	WILSON

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SANSK 307 INTERMEDIATE SANSKRIT.
PREREQUISTE--SANSK. 207 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

12831	LECT-DISC	10-12	MTUWTH	169	E E B	WILSON

SANSK 309 ADVANCED SANSKRIT.
PREREQUISITE--SANSK. 307 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS UNE 20 THROUGH AUGUST 25.

12849	LECT-DISC	ARR				WILSON

SECONDARY AND CONTINUING EDUCATION

DEPARTMENT OFFICE EDUCATION BUILDING

COURSES FOR ADVANCED UNDERGRADUATES

SE ED 240 PRINCIPLES OF SECONDARY EDUCATION.
PREREQUISITE--SE. ED. 101 AND PSYCH. 100.
2 HOURS

12857	LECT-DISC	12	TUWTHF	205	G H	MADSEN

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SE ED 354 AUDIO-VISUAL COMMUNICATION.
SAME AS EL. ED. 354.
PREREQUISITE--SENIOR OR GRADUATE STANDING.
3 HOURS, OR 1/2 OR 1 UNIT

12865	LECT-DISC	2-4	TUWTHF	1	EDUC	LORENZ

COURSES FOR GRADUATES

SE ED 439 FUNDAMENTALS OF CURRICULUM DEVELOPMENT.
1 UNIT
*SECTION J2 IS FOR STUDENTS OF HIGHER EDUCATION ONLY.

12873	LECT-DISC A	9	TUWTHF	2	EDUC	DEBOER
12881	LECT-DISC J1	11	TUWTHF	192	EDUC	DEBOER
12890	LECT-DISC *J2	11-3	W F	6	COM W	EPPERSON

SE ED 448 CONTINUING EDUCATION.
1/2 OR 1 UNIT
MEETS FIRST FOUR WEEKS ONLY

12903	LECT-DISC	1-3	TUWTHF	43	G H	ANDERSON

SE ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

12911	CONF		ARR				

SE ED 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF SECONDARY EDUCATION.
1 UNIT
SECTION G IS FOR MATH, SECTION H IS FOR SOCIAL STUDIES, SECTION L IS FOR ENGLISH, SECTION M IS FOR LANG., AND SECTION N IS FOR SCIENCE.
SECTION H MEETS FIRST FOUR WEEKS ONLY.

12962	LECT-DISC	*G	9	TUWTHF	382	EDUC	PINGRY
12920	LECT-DISC	*H	10-12	TUWTHF	1	EDUC	METCALF
12938	LECT-DISC	*L	10	TUWTHF	192	EDUC	MADSEN
12946	LECT-DISC	*M	11	TUWTHF	15	EDUC	STAFF
12954	LECT-DISC	*N	11	TUWTHF	136	ARMORY	EASLEY

SE ED 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1 TO 2 UNITS
*SECTION A IS RESTIRCTED TO NDEA STUDENTS ENROLLED IN THE LATIN AMERICAN HISTORY INSTITUTE.
*B SECTIONS ARE RESTRICTED TO NATIONAL SCIENCE FOUNDATION MATHEMATICS PROGRAM. JULY 3 THRU AUGUST 12.
*SECTION C IS A WORKSHOP IN ENGLISH PROGRAMS AND MATERIALS FOR THE DISADVANTAGED. REQUIRES CONSENT OF INSTRUCTOR. 2 UNITS.

12971	LECT-DISC	*A	10-12	MTUWTHF	43	L I R	WALLER
12989	LECT-DISC	*B1	9-12	MTUWTHF	242	ARMORY	WOLFE
		*B1	1-4	MTUWTHF	134	ARMORY	
12997	LECT-DISC	*B2	9-12	MTUWTHF	243	ARMORY	
		*B2	1-4	MTUWTHF	136	ARMORY	
13003	LECT-DISC	*B3	9-12	MTUWTHF	137	ARMORY	
		*B3	1-4	MTUWTHF	137	ARMORY	
13011	LECT-DISC	*B4	9-12	MTUWTHF	428	ARMORY	
		*B4	1-4	MTUWTHF	428	ARMORY	
13020	LECT-DISC	*B5	9-12	MTUWTHF	429	ARMORY	
		*B5	1-4	MTUWTHF	429	ARMORY	
13038	LECT-DISC	*B6	9-12	MTUWTHF	430	ARMORY	
		*B6	1-4	MTUWTHF	430	ARMORY	
13046	LECT-DISC	*B7	9-12	MTUWTHF	431	ARMORY	
		*B7	1-4	MTUWTHF	431	ARMORY	
13054	LECT-DISC	*B8	9-12	MTUWTHF	432	ARMORY	
		*B8	1-4	MTUWTHF	432	ARMORY	
13062	LECT-DISC	*B9	9-12	MTUWTHF	433	ARMORY	
		*B9	1-4	MTUWTHF	433	ARMORY	
13071	LECT-DISC	*C	3-5	TUWTHF	385	EDUC	WALKER

SE ED 467 THE AMERICAN COLLEGE.
1 UNIT

13089	LECT-DISC		8-10	W F	96	COM W	FLEY

SE ED 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS

13097	CONF		ARR				

SOCIAL SCIENCES

THE DIVISION OF SOCIAL SCIENCES SPONSORS THE FOLLOWING PROGRAMS--A-AN UNDERGRADUATE MAJOR AND MINOR IN LATIN AMERICAN STUDIES, B-A GRADUATE MINOR IN LATIN AMERICAN STUDIES, C-AN UNDERGRADUATE MAJOR AND MINOR IN RUSSIAN AREA STUDIES, D-A GRADUATE MINOR IN RUSSIAN AREA STUDIES, E-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE SOCIAL SCIENCES, F-A GRADUATE PROGRAM LEADING TO THE DEGREE OF MASTER OF ARTS IN THE TEACHING OF SOCIAL STUDIES. G-A GRADUATE MAJOR AND MINOR AND UNDERGRADUATE MINOR IN LINGUISTICS.

THE STUDY OF INTERNATIONAL AFFAIRS AND OF NON-WESTERN AREAS.
THE DIVISION OF SOCIAL SCIENCES CALLS TO THE ATTENTION OF STUDENTS THE OFFERINGS IN THE GENERAL FIELD OF INTERNATIONAL AFFAIRS AND OF NON-WESTERN AREAS FOUND AT THE UNIVERSITY OF ILLINOIS. THE DIVISION RECOMMENDS THAT THE STUDENT INTERESTED IN INTERNATIONAL AFFAIRS AND NON-WESTERN AREAS CONSULT WITH THE ADVISOR IN HIS MAJOR DEPARTMENT OR WITH THE CENTERS FOR ASIAN, LATIN AMERICAN, AND RUSSIAN LANGUAGE AND AREA STUDIES CONCERNING THE POSSIBILITY OF TAKING COURSES IN THESE SUBJECTS, EITHER AS PART OF A MINOR OR SPLIT MINOR OR AS ELECTIVES.

ENTRANCE EXAMINATIONS FOR THE FOREIGN SERVICE OF THE UNITED STATES. STUDENTS INTERESTED IN PREPARING FOR THESE EXAMINATIONS ARE URGED TO CONSULT WITH THE GOVERNMENT PLACEMENT CONSULTANT OF THE UNIVERSITY PLACEMENT SYSTEM, WHO MAY BE SEEN AT THE INSTITUTE OF GOVERNMENT AND PUBLIC AFFAIRS, 1201 WEST NEVADA STREET.

SOCIOLOGY

DEPARTMENT OFFICE 342 L H

MAJOR--TWENTY HOURS FROM COURSES IN SOCIOLOGY, EXCLUDING SOCIOLOGY 100, 104, AND 105. SOCIOLOGY 104, 105 SAME AS SOCIOLOGY/DIVISION OF GENERAL STUDIES 151, 152. SOCIOLOGY MAJORS ARE REQUIRED TO TAKE SOCIOLOGY 184, 185, 300, AT LEAST ONE COURSE FROM AMONG 212, 320, 321, AND 323-THE INTERPERSONAL RELATIONS AREA-, AND AT LEAST ONE COURSE FROM AMONG 218, 223, AND 270-THE SOCIETAL ANALYSIS AREA-.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANTHROPOLOGY, ECONOMICS, HISTORY, LAW, MATHEMATICS, PHILOSOPHY, POLITICAL SCIENCE PSYCHOLOGY AND SOCIAL WORK. THE CURRICULUM IN RUSSIAN LANGUAGE AND AREA STUDIES IS ALSO ACCEPTED AS A MINOR.

DEPARTMENTAL DISTINCTION--IN ORDER TO BE AWARDED DISTINCTION IN SOCIOLOGY AT GRADUATION, THE STUDENT MUST 1 -HAVE AT LEAST A 4.0 ALL UNIVERSITY GRADE POINT AVERAGE, 2 - MEET THE GENERAL REQUIREMENTS FOR A MAJOR IN SOCIOLOGY, AND, 3- IN ADDITION TO THE WORK DONE FOR THE MAJOR, EARN FOUR SEMESTER HOURS OF CREDIT BY ENROLLING IN BOTH OF THE HONORS COURSES--SOC. 290-291.

COURSES FOR UNDERGRADUATES

SOC 185 INTRODUCTION TO SOCIAL STATISTICS.
SAME AS GEOG. 185.
PREREQUISITE--SOC. 100 OR CONSENT OF INSTRUCTOR OR SIX HOURS IN SOCIOLOGY, POLITICAL SCIENCE, ANTHROPOLOGY, OR GEOGRAPHY.
3 HOURS

13101	LECT-DISC	A	1-3	TUWTH	111 G H	SALTIEL

SOC 190 INDIVIDUAL TOPICS FOR UNDERGRADUATES.
PREREQUISITE--SIX HOURS OF SOCIOLOGY OR THREE HOURS OF SOCIOLOGY AND CONCURRENT REGISTRATION IN ANOTHER SOCIOLOGY COURSE.
1 OR 2 HOURS.

13119	CONF	A	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES

SOC 228 SOCIOLOGY OF LEISURE.
PREREQUISITE--THREE HOURS OF SOCIOLOGY OR CONSENT OF INSTRUCTOR.
3 HOURS

13127	LECT-DISC	A	10-12	TUWTH	111	G H	LUESCHEN

SOC 277 RURAL SOCIAL CHANGE.
SAME AS R. SOC. 277.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
3 HOURS

13135	LECT-DISC	B	9	MTUWTHF	W115	T H	FOLSE
		B	8	TU	W115	T H	

SOC 290 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

13143	CONF	A	ARR	STAFF

SOC 291 HONORS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

13151	CONF	A	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SOC 340 SOCIAL MOVEMENTS.
PREREQUISITE--SOC. 100 OR 151.
3 HOURS, OR 1/2 OR 1 UNIT
SPECIAL EMPHASIS ON INDIA.

13160	LECT-DISC	A	9	MTUWTHF	111	G H	WARD

COURSES FOR GRADUATES

SOC 435 FIELD INSTRUCTION IN SOCIOLOGICAL RESEARCH ON TREATMENT OF DEVIANT BEHAVIOR.
APPLICATION FOR ADMISSION TO THIS COURSE MUST BE MADE IN APRIL PRIOR TO THE SUMMER SESSION IN WHICH ENROLLMENT IS DESIRED.
PREREQUISITE--SOC. 431, 333, AND 424, OR CONSENT OF INSTRUCTOR.
*STUDENTS MAY REREGISTER IN A SUBSEQUENT SUMMER FOR A SECOND UNIT OF CREDIT, PROVIDED THERE IS APPRECIABLE CONTRAST IN THEIR TWO FIELD LOCATIONS.
*1 UNIT

13178	CONF	A	ARR	DEVRIES, GLASER

SOC 477 RURAL COMMUNITY ORGANIZATION AND DEVELOPMENT.
SAME AS R. SOC. 477.
PREREQUISITE--SOC. 100 OR R. SOC. 117.
FIELD TRIP, ESTIMATED EXPENSE, $5.
1 UNIT
FIRST FOUR WEEKS.

13186	LECT-DISC	C	10-12	TUWTHF	316S	M H	LINDSTROM

SOC 480 SOCIOLOGICAL THEORY AND METHOD.
1 UNIT

13194	LECT-DISC	A	10-12	TU TH	348	L H	GLASER

SOC 487 SPECIAL PROBLEMS IN RURAL SOCIOLOGY.
SAME AS R. SOC. 487.
PREREQUISITE--ONE UNIT OF GRADUATE CREDIT IN SOCIOLOGY, CONSENT OF INSTRUCTOR.
1/2 OR 1 UNIT

13208	CONF		ARR	STAFF

SOC 490 INDIVIDUAL TOPICS IN SOCIOLOGY.
1/2 TO 2 UNITS

13216	CONF	A	ARR	STAFF

SOC 499 THESIS RESEARCH.
0 TO 2 UNITS
*SECTION A IS FOR MASTERS THESIS AND SECTION B IS FOR DOCTORS THESIS.

13224	CONF	*A	ARR	STAFF
13232	CONF	*B	ARR	STAFF

SPANISH

DEPARTMENT OFFICE 224 L H

MAJOR--TWENTY HOURS IN SPANISH, EXCLUDING SPANISH 101,102,103, 104, AND 115, AND INCLUDING AT LEAST EIGHT HOURS OF SPANISH FROM THE GROUP FOR ADVANCED UNDERGRADUATES AND GRADUATES. EITHER LING. 300, INTRODUCTION TO LINGUISTICS, OR LING. 302, COMPARATIVE LINGUISTICS, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH. EITHER SOC.SCI. 101 OR 102, LATIN-AMERICAN CIVILIZATION, MAY BE COUNTED TOWARD THE MAJOR IN SPANISH AND IS REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.

MINORS--TWENTY HOURS IN NOT MORE THAN TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN, EDUCATION, ENGLISH--EXCLUDING RHET. 101 AND 102--FRENCH, GERMAN, GREEK, HISTORY, ITALIAN, LATIN, LATIN-AMERICAN STUDIES, LIBRARY SCIENCE, MEDIEVAL CIVILIZATION STUDIES, PHILOSOPHY, PORTUGUESE, AND RUSSIAN.

COURSES FOR UNDERGRADUATES

SPAN 101 ELEMENTARY SPANISH, I.
*NO CREDIT TOWARD GRADUATION IS GIVEN FOR SPAN. 101 WITHOUT SPAN. 102.
*4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL.

13241	LECT-DISC	8-10	MTUWTH	170 L H	

SPAN 102 ELEMENTARY SPANISH, II.
PREREQUISITE--SPAN. 101 OR ONE YEAR OF HIGH SCHOOL SPANISH.
4 HOURS
ALL STUDENTS IN THIS COURSE ARE REQUIRED TO REGISTER FOR TWO HOURS PER WEEK IN THE LANGUAGE LABORATORY, 202 LINCOLN HALL

13259	LECT-DISC	1-3	MTUWTH	317 G H	MEINHARDT

SPAN 103 INTERMEDIATE SPANISH, I.
PREREQUISITE--SPAN. 102 OR TWO YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

13267	LECT-DISC	3-5	MTUWTH	317 G H	

SPAN 104 INTERMEDIATE SPANISH, II.
PREREQUISITE--SPAN. 103 OR THREE YEARS OF HIGH SCHOOL SPANISH.
4 HOURS

13275	LECT-DISC	10-12	MTUWTH	317 G H	BALDWIN

COURSES FOR ADVANCED UNDERGRADUATES

SPAN 211 INTERMEDIATE COMPOSITION AND CONVERSATION, I.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 104 OR FOUR YEARS OF HIGH SCHOOL SPANISH.
3 HOURS

13283	LECT-DISC	9	MTUWTHF	317 G H	FLORES
		11	F	317 G H	

SPAN 212 INTERMEDIATE COMPOSITION AND CONVERSATION, II.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 211 OR EQUIVALENT.
3 HOURS

13291	LECT-DISC	9	MTUWTHF	317 G H	FLORES
		11	F	317 G H	

SPAN 213 ADVANCED COMPOSITION AND CONVERSATION, I.
PREREQUISITE--SPAN. 212 OR EQUIVALENT.
3 HOURS

13305	LECT-DISC	9	MTUWTHF	317	G H	FLORES
		11	F	317	G H	

SPAN 214 ADVANCED COMPOSITION AND CONVERSATION, II.
PREREQUISITE--SPAN. 213 OR EQUIVALENT.
3 HOURS

13313	LECT-DISC	9	MTUWTHF	317	G H	FLORES
		11	F	317	G H	

SPAN 222 SPANISH AMERICAN PROSE FICTION OF THE TWENTIETH CENTURY.
PREREQUISITE--SPAN. 221.
3 HOURS

13321	LECT-DISC	8	MTUWTHF	315	G H	BALDWIN
		10	F	317	G H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

NOTE--ALL ADVANCED COURSES IN SPANISH UNLESS OTHERWISE NOTED HAVE THE FOLLOWING PREREQUISITE--SPAN. 222 OR EQUIVALENT.

SPAN 306 THE GENERATION OF 1898.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
3 HOURS OR 1/2 UNIT

13330	LECT-DISC	12	F	315	G H	LOTT
		1	MTUWTHF	315	G H	

SPAN 307 SPANISH AMERICAN LITERATURE TO 1888.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
3 HOURS OR 1/2 UNIT

13348	LECT-DISC	2	F	315	G H	LEAL
		3	MTUWTHF	315	G H	

SPAN 332 LA CULTURA HISPANICA--HISPANOAMERICA.
EITHER SPAN. 331 OR 332 REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS OR 1/2 UNIT

13356	LECT-DISC	4	MTUWTH	315	G H	MEINHARDT

SPAN 351 PHONETICS.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS OR 1/2 UNIT

13364	LECT-DISC	11	MTUWTH	315	G H	FLORES

SPAN 352 SYNTAX.
REQUIRED FOR TEACHER-TRAINING MAJORS IN SPANISH.
PREREQUISITE--SPAN. 222 OR EQUIVALENT.
2 HOURS OR 1/2 UNIT

13372	LECT-DISC	9	MTUWTH	315	G H	SHOEMAKER

SPAN 382 LANGUAGE LABORATORY TECHNIQUES.
SAME AS FR., GER., AND RUSS. 382.
PREREQUISITE--3 YEARS OF MODERN FOREIGN LANGUAGE AT THE COLLEGE LEVEL, OR THE EQUIVALENT.
2 HOURS OR 1/2 UNIT

13381	LECT-DISC	10	MTUWTH	210	L H	MYERS

COURSES FOR GRADUATES

SPAN 405 SPANISH BIBLIOGRAPHY.
1/2 UNIT

13399	LECT-DISC	9-11	F	315	G H	ALLEN

SPAN 415 RENAISSANCE AND BAROQUE PROSE IN SPAIN.
PREREQUISITE--SPAN. 311 AND 314, OR EQUIVALENT.
1 UNIT

13402	LECT-DISC	10	MTUWTH	315	G H	ALLEN

SPAN 424 CONTEMPORARY SPANISH DRAMA.
1 UNIT

13411	LECT-DISC	12	MTUWTH	315	G H	LOTT

SPAN 438 SPANISH-AMERICAN ESSAY.
PREREQUISITE--SPAN. 307 OR 308.
1 UNIT

13429	LECT-DISC	2	MTUWTH	315	G H	LEAL

SPAN 491 SPECIAL TOPICS IN SPANISH.
1/2 OR 1 UNIT

13437	CONF	ARR	SHOEMAKER, ALLEN, LEAL, LOTT

SPAN 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS

13445	CONF	ARR	SHOEMAKER, LEAL

SPECIAL EDUCATION

DEPARTMENT OFFICE 220 EDUC

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SP ED 316 THE GIFTED CHILD IN SCHOOL AND SOCIETY.
PREREQUISITE--ED. PSY. 211 OR EL. ED. 236.
3 HOURS, OR 1/2 TO 1 UNIT

13453	LECT-DISC	1	TUWTHF	154	ADMIN	STAFF

SP ED 318 WORKSHOP AND LABORATORY IN EDUCATION OF EXCEPTIONAL CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
4 TO 8 HOURS, OR 1 TO 2 UNITS
*SECTION B IS FOR LEARNING DISABILITIES AND WILL BE OFFERED FOR 8 WEEKS

13461	LECT-DISC *B	8-5	TUWTHF	ARR		BANNATYNE & HIRSHOREN

SP ED 321 EDUCATION OF DISTURBED AND CONDUCT-PROBLEM CHILDREN.
PREREQUISITE--SP. ED. 117 OR EQUIVALENT AND EL. ED. 236, OR EQUIVALENT.
3 HOURS, OR 1/2 TO 1 UNIT

13470	LECT-DISC	11	TUWTHF	382	EDUC	J GLAVIN

SP ED 322 PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED, I.
PREREQUISITE--EL. ED. 231, SENIOR STANDING.
3 HOURS OR 1/2 UNIT
*FIRST FOUR WEEKS ONLY.

13488	LECT-DISC	*10-12	TUWTHF	389	EDUC	JORDAN

SP ED 323 PSYCHOLOGY AND EDUCATION OF THE MENTALLY HANDICAPPED, II.
PREREQUISITE--SP. ED. 322.
3 HOURS OR 1/2 UNIT
*SECOND FOUR WEEKS ONLY.

13496	LECT-DISC	*10-12	TUWTHF	389	EDUC	JORDAN

COURSES FOR GRADUATES

SP ED 417 PSYCHO-EDUCATIONAL PROBLEMS OF EXCEPTIONAL CHILDREN.
PREREQUISITE--SIXTEEN HOURS OF PSYCHOLOGY AND/OR EDUCATION, OR CONSENT OF INSTRUCTOR.
1 UNIT
*THESE SECTIONS RESTRICTED TO NDEA ELEMENTARY GUIDANCE INSTITUTE STUDENTS ONLY.

13500	LECT-DISC A	9	TUWTHF	140	COM W	STAFF
13518	LECT-DISC *G1	8-10	TU TH	96	COM W	MADSEN
13526	LECT-DISC *G2	10-12	TU TH	20	COM W	MADSEN

SP ED 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

13534	CONF		ARR		210	EDUC	STAFF

SP ED 456 PROBLEMS AND TRENDS IN SPECIAL EDUCATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 TO 2 UNITS

13542	LECT	C	8	MTUWTHF	223	G H	DURANT
13551	DISC	C1A	9-12	MTUWTHF	201	E B	DURANT
13569	DISC	C1B	9-12	MTUWTHF	205	E B	PAYETTE
13577	DISC	C1C	9-12	MTUWTHF	208	E B	SIMMONS
13585	DISC	C1D	9-12	MTUWTHF	122	D K H	STAFF
13593	DISC	C2A	1-4	MTUWTHF	201	E B	DURANT
13607	DISC	C2B	1-4	MTUWTHF	205	E B	PAYETTE
13615	DISC	C2C	1-4	MTUWTHF	208	E B	SIMMONS
13623	DISC	C2D	1-4	MTUWTHF	28	COM W	STAFF
13631	DISC	C2E	1-4	MTUWTHF	122	D K H	STAFF

SP ED 490 SEMINAR FOR ADVANCED STUDENTS OF EDUCATION.
OPEN ONLY TO PERSONS WHO HAVE COMPLETED THE PRELIMINARY EXAMINATION FOR THE DEGREES OF PH.D. OR ED.D.
1 TO 2 UNITS

13640	CONF		ARR		210	EDUC	STAFF

SP ED 491 FIELD STUDY AND THESIS SEMINAR.
LIMITED TO ED.D. CANDIDATES.
1 TO 2 UNITS

13658	CONF		ARR		210	EDUC	STAFF

SP ED 499 THESIS RESEARCH.
0 TO 2 1/2 UNITS

13666	CONF		ARR		210	EDUC	STAFF

SPEECH AND THEATRE

DEPARTMENT OFFICE 133 L H

MAJOR--TWENTY HOURS IN SPEECH IN ADDITION TO SPCH. 101, 105, AND 141. AT LEAST FIVE OF THE TWENTY HOURS MUST BE IN COURSES NUMBERED 300 OR HIGHER, SPCH. 301 MUST BE INCLUDED. IN DECLARING A MAJOR IN SPEECH THE STUDENT MAY CHOOSE ONE OF THESE AREAS FOR EMPHASIS--GENERAL SPEECH, PUBLIC ADDRESS, INTERPRETATION, THEATRE ART, SPEECH SCIENCE AND PHONETICS, SPEECH CORRECTION AND AUDIOLOGY.
THE STUDENT SHOULD REPORT TO 133 LINCOLN HALL TO BE ASSIGNED AN AREA ADVISER WITH WHOM HE MAY CONFER CONCERNING REQUIRED AND RECOMMENDED COURSES.

MINORS--TWENTY HOURS IN ONE OR TWO COLLEGE OF LIBERAL ARTS AND SCIENCES DEPARTMENTS OR IN INTERDEPARTMENTAL PROGRAMS APPROVED BY THE COLLEGE. MINOR PROGRAMS OUTSIDE THE COLLEGE OF LIBERAL ARTS AND SCIENCES MAY BE ARRANGED WITH THE APPROVAL OF THE STUDENTS MAJOR ADVISER AND HIS DEPARTMENT HEAD. IF TWO MINOR SUBJECTS ARE CHOSEN, AT LEAST EIGHT HOURS MUST BE INCLUDED IN EACH. A MINOR PROGRAM IN ENGLISH MAY NOT INCLUDE MORE THAN THREE HOURS IN LITERATURE COURSES OPEN TO FRESHMEN AND SOPHOMORES AND MAY NOT INCLUDE RHET. 101, 102, 151, 271, AND 272. NO LANGUAGE COURSES MAY SATISFY THE MINOR REQUIREMENTS IF THEY ARE EXCLUDED FROM THE MAJORS OF THE LANGUAGE DEPARTMENTS.

TWO TEACHER-TRAINING CURRICULA ARE OFFERED IN SPEECH. SEE THE CURRICULUM PREPARATORY TO SPEECH CORRECTION WORK AND THE CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH.

COURSES FOR UNDERGRADUATES

SPCH 101 PRINCIPLES OF EFFECTIVE SPEAKING.
3 HOURS

13674	LECT-DISC	A	8-10	M W F	255	ARMORY	DIETER
13682	LECT-DISC	B	9	MTUWTHF	241	ARMORY	BROOKS
		B	10	M	241	ARMORY	
13691	LECT-DISC	C	10	MTUWTHF	145	L H	INCE
		C	11	M	145	L H	
13704	LECT-DISC	D	11	MTUWTHF	241	ARMORY	BROOKS
		D	10	F	241	ARMORY	
13712	LECT-DISC	E	1-3	M W F	262	ARMORY	CRONKHITE

SPCH 113 GROUP DISCUSSION AND CONFERENCE LEADERSHIP.
PREREQUISITE--SOPHOMORE STANDING. BY PERMISSION OF THE HEAD OF THE DEPARTMENT THE PREREQUISITE MAY BE WAIVED FOR SUPERIOR STUDENTS, INCLUDING JAMES SCHOLARS.
3 HOURS

13721	LECT-DISC	E	1-3	M W F	255	ARMORY	GULLEY

SPCH 121 ADVANCED PUBLIC SPEAKING--THE LOGICAL BASES OF DISCOURSE.
PREREQUISITE--SPCH. 101, SOPHOMORE STANDING. BY PERMISSION OF THE HEAD OF THE DEPARTMENT THE PREREQUISITE MAY BE WAIVED FOR SUPERIOR STUDENTS, INCLUDING JAMES SCHOLARS.
3 HOURS

13739	LECT-DISC	C	10-12	M W F	255	ARMORY	WENZEL

SPCH 141 ORAL INTERPRETATION.
3 HOURS

13747	LECT-DISC	B	9	MTUWTHF	262	ARMORY	
		B	10	W	262	ARMORY	
13755	LECT-DISC	D	11	MTUWTHF	140	L H	DEIMER
		D	10	TU	140	L H	

SPCH 157 ELEMENTS OF STAGECRAFT.
4 HOURS

13763	LECT-DISC	B	9-11	MTUWTH	L H THEATER		TOSCAN

COURSES FOR ADVANCED UNDERGRADUATES

SPCH 208 SPEECH AND HEARING PROBLEMS IN THE CLASSROOM.
PREREQUISITE--JUNIOR STANDING.
3 HOURS

13771	LECT-DISC	N	10-12	TUWTH	106	SP CLINIC	GOOD

SPCH 291 HONORS COURSE.
PREREQUISITE--SENIOR STANDING, A GRADE-POINT AVERAGE OF 4.0 OR CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

13780	CONF	&A	ARR				STAFF

SPCH 293 INDIVIDUAL TOPICS.
PREREQUISITE--TEN HOURS OF SPEECH, GRADE-POINT AVERAGE OF 3.75, CONSENT OF HEAD OF DEPARTMENT.
*STUDENTS MAY ACCUMULATE 4 HOURS.
*2 HOURS

13798	CONF	&A	ARR				STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SPCH 311 BRITISH PUBLIC ADDRESS.
3 HOURS, OR 1/2 OR 1 UNIT
*ONE HOUR TO BE ARRANGED.

13801	LECT-DISC	D	*11	MTUWTHF	121	L H	MURPHY

SPCH 345 CONTEMPORARY APPROACHES TO ORAL INTERPRETATION.
PREREQUISITE--SPCH. 141 OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

13810	LECT-DISC	D	11	MTUWTHF	262	ARMORY	HAWKINS
		D	10	TH	262	ARMORY	

SPCH 353 CREATIVE DRAMATICS FOR CHILDREN.
PREREQUISITE--CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

13828	LECT-DISC	E	1-3	M W F	160	ARMORY	TYMCHYSHYN

SPCH 355 ADVANCED PLAY DIRECTING.
PREREQUISITE--SPCH. 255 OR EQUIVALENT.
3 HOURS, OR 1/2 OR 1 UNIT

13836	LECT-DISC	C	10-12	M W F	160	ARMORY	ARBENZ

SPCH 368 HISTORY OF THEATRE COSTUME.
PREREQUISITE--SPCH. 361 AND 362, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT
*TWO HOURS TO BE ARRANGED.

13844	LECT-DISC		*8-10	TU TH	121	L H	RICHARDSON

SPCH 377 THE BASES OF SPEECH AND HEARING SCIENCE.
NOT OPEN TO STUDENTS WITH CREDIT IN SPCH. 375 OR 376.
PREREQUISITE--SPCH. 109 OR EQUIVALENT, AND CONSENT OF INSTRUCTOR.
3 HOURS OR 1/2 UNIT

13852	LECT-DISC	B	9	MTUWTHF	104	SP CLINIC	ZEMLIN

SPCH 390 COMMUNICATION DISORDERS IN CHILDREN--HABILITATION AND REHABILITATION.
PREREQUISITE--SPCH. 383. SENIOR OR GRADUATE STANDING OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

13861	LECT-DISC	E	1	MTUWTHF	106	SP CLINIC	NASCA

SPCH 396 DIAGNOSIS OF HEARING IMPAIRMENTS IN INFANTS AND YOUNG CHILDREN.
PREREQUISITE--SPCH. 391, 395, OR CONSENT OF INSTRUCTOR.
3 HOURS, OR 1/2 OR 1 UNIT

13879	LECT-DISC		ARR		106	SP CLINIC	STARK

COURSES FOR GRADUATES

SPCH 400 SEMINAR IN DRAMATIC FORM AND STRUCTURE.
PREREQUISITE--SPCH. 361 AND 362, OR EQUIVALENT, AND CONSENT OF INSTRUCTOR.
1 UNIT

13887	CONF		1-3	TU TH	121	L H	SMALLEY

SPCH 403 SEMINAR FOR TEACHERS OF SPEECH.
1 UNIT

13895	LECT-DISC		ARR				BURNS

SPCH 411 THE GREEK TRADITION IN RHETORIC AND ORATORY.
1 UNIT

13909	LECT-DISC		ARR				BATEMAN

SPCH 430 CONTEMPORARY THEORIES OF ORAL COMMUNICATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT

13917	LECT-DISC		ARR				SCHEIDEL

SPCH 451 PROBLEMS IN PLAY DIRECTING IN THE EDUCATIONAL THEATRE.
1 UNIT

13925	LECT-DISC		ARR				BEHRINGER

SPCH 461 ADVANCED THEATRE TECHNIQUES.
PREREQUISITE--AT LEAST 1 SEMESTER OF GRADUATE STUDY IN THE AREA OF THEATRE, CONSENT OF HEAD OF DEPARTMENT AND OF INSTRUCTOR.
1/2 OR 1 UNIT

13933	LECT-DISC		10-12	TU TH	160	ARMORY	AHART

SPCH 483 PSYCHOLOGY OF SPEECH AND HEARING DISORDERS, I.
SAME AS PSYCH. 483.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
13941 LECT-DISC ARR ONEILL

SPCH 486 ADVANCED CLINICAL TECHNIQUES IN SPEECH AND HEARING.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/2 TO 4 UNITS
13950 LECT-DISC ARR 104 SP CLINIC NASCA, SIMPSON

SPCH 488 DIAGNOSTIC PROCEDURES IN PATHOLOGIES OF SPEECH AND LANGUAGE.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
13968 LECT-DISC ARR SANDERS

SPCH 492 ADVANCED AUDIOLOGY.
PREREQUISITE--SPCH. 395 AND 397.
1 UNIT
13976 LECT-DISC ARR STARK

SPCH 495 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF THE HEAD OF THE DEPARTMENT.
*OPEN TO MASTERS CANDIDATES FOR ONE UNIT, TO DOCTORS CANDIDATES FOR ONE OR TWO UNITS.
*1 OR 2 UNITS
13984 CONF ARR STAFF

SPCH 499 THESIS RESEARCH.
0 TO 2 UNITS
INSTRUCTORS BEHRINGER, CRONKHITE, DIETER, GULLEY, HEWITT, MURPHY, NICHOLS, ONEILL, SCHEIDEL, SCOTT, SHATTUCK SLOAN, STARK, WALLACE, WENZEL, ZEMLIN
13992 CONF ARR STAFF

TAMIL

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

TAMIL 307 INTERMEDIATE TAMIL.
PREREQUISITE--ELEMENTARY TAMIL OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.
14009 LECT-DISC 8-10 MTUWTH 245 E E B ASHER

TAMIL 309 ADVANCED TAMIL.
PREREQUISITE--TAMIL 307 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.
14017 LECT-DISC 10-12 MTUWTH 245 E E B ASHER

TELUGU

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES

TELUG 207 ELEMENTARY TELUGU.
8 HOURS
MEETS JUNE 20 THROUGH AUGUST 25.

14025	LECT-DISC	8-10	MTUWTHF	257	E E B	SUBBARAO
		1	MTUWTH	257	E E B	SUBBARAO

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

TELUG 307 INTERMEDIATE TELUGU.
PREREQUISITE--TELUG. 207 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

14033	LECT-DISC	8-10	MTUWTH	254	E E B	ROW

TELUG 309 ADVANCED TELUGU.
PREREQUISITE--TELUG. 307.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

14041	LECT-DISC	10-12	MTUWTH	257	E E B	SUBBARAO

THEORETICAL AND APPLIED MECHANICS

DEPARTMENT OFFICE 212 T L

COURSES FOR UNDERGRADUATES

T A M 150 ANALYTICAL MECHANICS--STATICS.
PREREQUISITE--PHYCS. 101 OR 106. REGISTRATION IN MATH. 142 OR 143.
2 HOURS

14050	LECT-DISC	P	8	MTU THF	252	E E B

COURSES FOR ADVANCED UNDERGRADUATES

T A M 211 ANALYTICAL MECHANICS--DYNAMICS.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR 143.
3 HOURS

14068	LECT-DISC	P	9	MTUWTHFS	252	E E B

T A M 221 ELEMENTARY MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T.A.M. 150 OR EQUIVALENT. MATH. 142 OR 143.
3 HOURS

14076	LECT-DISC	P	10	MTUWTHFS	252	E E B

T A M 235 FLUID MECHANICS.
PREREQUISITE--T.A.M. 211 OR 212.
4 HOURS

14084	LECT-DISC	E	9	MTUWTHFS	225A	T L
	LAB	E	3-5	TU TH	126	T L

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

T A M 311 MECHANICAL VIBRATIONS.
PREREQUISITE--T A M 154 OR 156 OR 211 OR 212 AND 221.
3 HOURS, OR 1/2 OR 1 UNIT

14092	LECT-DISC	P	11	MTUWTHFS	250	E E B

T A M 321 ADVANCED MECHANICS OF DEFORMABLE BODIES.
PREREQUISITE--T A M 221 AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT
*SECTION J IS RESTRICTED TO SUCCESSFUL APPLICANTS TO AN 8-WEEK SUMMER INSTITUTE SPONSORED BY THE NATIOANL SCIENCE FOUNDATION FOR INSTRUCTORS IN JUNIOR COLLEGES AND TECHNICAL INSTITUTES TEACHING IN TECHNICAL AND PRE-ENGINEERING CURRICULA.

14114	LECT-DISC	*J	10	M W F	136	P B	
	LAB	*J	1-3	TU TH	225	T L	
14106	LECT-DISC	P	8	MTUWTHFS	250	E E B	

T A M 326 EXPERIMENTAL STRESS ANALYSIS.
PREREQUISITE--T A M 150, 211, 212, 221, AND 223 OR 224.
3 HOURS, OR 1/2 OR 1 UNIT

14122	LAB-DISC	Z	10-12	MTU THF	302C	T L

T A M 346 DIMENSIONAL ANALYSIS AND THEORY OF MODELS.
3 HOURS, OR 1/2 OR 1 UNIT

14131	LECT-DISC	Z	9	MTUWTHFS	250	E E B

COURSES FOR GRADUATES

T A M 441 APPLIED ANALYSIS IN ENGINEERING, I.
PREREQUISITE--MATH. 143.
1 UNIT

14149	LECT-DISC		10	MTUWTHFS	250	E E B

T A M 493 ADVANCED INDEPENDENT STUDY--SPECIAL RESEARCH.
1/2 TO 2 UNITS

14157	CONF	X	ARR	

T A M 499 THESIS RESEARCH.
0 TO 2 UNITS

14165	CONF	F	ARR	KESLER
14173	CONF	K	ARR	SIDEBOTTOM
14181	CONF	M	ARR	SMITH
14190	CONF	X	ARR	

URBAN PLANNING

DEPARTMENT OFFICE 208 M H

COURSES FOR GRADUATES

U P 488 URBAN PLANNING RESEARCH.
PREREQUISITE--U. P. 171 OR CONSENT OF INSTRUCTOR.
1/2 TO 2 UNITS

14203	CONF		ARR	STAFF

U P 499 THESIS RESEARCH.
PREREQUISITE--GRADUATE STANDING IN URBAN PLANNING.
1/2 TO 2 UNITS

14211	CONF		ARR	STAFF

DEPARTMENT OFFICE 309H D H

COURSES FOR ADVANCED UNDERGRADUATES

URDU 207 ELEMENTARY HINDI-URDU.
SAME AS HINDI 207.
8 HOURS
MEETS JUNE 20 THROUGH AUGUST 25.

14220	LECT-DISC	8-10	MTUWTHF	219	G H	ULLRICH
		1	MTUWTH	219	G H	ULLRICH

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

URDU 307 INTERMEDIATE URDU.
PREREQUISITE--URDU 207.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

14238	LECT-DISC	8-10	MTUWTH	240	ADMIN	HASAN

URDU 309 ADVANCED URDU.
PREREQUISITE--URDU 307 OR CONSENT OF INSTRUCTOR.
6 HOURS OR 1 UNIT
MEETS JUNE 20 THROUGH AUGUST 25.

14246	LECT-DISC	10-12	MTUWTH	240	ADMIN	HASAN

VETERINARY MEDICAL SCIENCE

DEPARTMENT OFFICE 131 V M

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

V M S 392 SPECIAL PROBLEMS.
PREREQUISITE--REGISTRATION IN VETERINARY CURRICULUM WITH GRADE POINT AVERAGE OF 3.5 OR ABOVE.
*STUDENTS MAY ACCUMULATE ONE UNIT.
*1/2 UNIT

14254	LAB	ARR				STAFF

COURSES FOR GRADUATES

V M S 408 PRINCIPLES OF HEMATOLOGY.
PREREQUISITE--V.M.S. 301 OR EQUIVALENT, OR CONSENT OF INSTRUCTOR.
1/2 UNIT

14262	LAB-DISC	ARR		334	V M	ST CLAIR

V M S 459 ADVANCED CORRELATIVE PATHOLOGY.
PREREQUISITE--V.M.S. 335, 308, 445, 450, OR EQUIVALENT AND CONSENT OF INSTRUCTOR.
0 TO 1 1/2 UNITS

14271	LAB-DISC	ARR		31	V M	SIMON, WATRACH

V M S 460 ADVANCED VETERINARY PHYSIOLOGY.
PREREQUISITE--V.M.S. 315, 316, OR EQUIVALENT, CONSENT OF INSTRUCTOR.
1 UNIT

14289	LAB-DISC	ARR		266	V M	LINK

V M S 492 SPECIAL PROBLEMS.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1/4 TO 1 UNIT

14297	LAB-DISC	ARR				STAFF

V M S 499 THESIS RESEARCH.
0 TO 2 UNITS

14301	LAB	ARR				STAFF

VETERINARY MEDICINE

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

V M 392 SPECIAL PROBLEMS.
PREREQUISITE--PROFESSIONAL STANDING IN VETERINARY CURRICULUM AND GRADE POINT AVERAGE OF 3.5.
*STUDENTS MAY ACCUMULATE 6 HOURS, OR 1 UNIT
*3 HOURS OR 1/2 UNIT

14319	LAB-DISC	ARR	STAFF

VOCATIONAL AND TECHNICAL EDUCATION

DEPARTMENT OFFICE 347A EDUCATION BUILDING

COURSES FOR UNDERGRADUATES

VOTEC 189 INDUSTRIAL PRACTICES.
PREREQUISITE--SOPHOMORE STANDING, ENROLLMENT IN INDUSTRIAL EDUCATION OPTIONS II AND III.
*STUDENTS MAY ACCUMULATE SEVENTEEN HOURS.
*2 OR 3 HOURS
TOTAL ACCUMULATED HOURS TO BE DETERMINED IN CONSULTATION WITH ADVISOR.

14327	PRACT	ARR	STOODLEY

COURSES FOR ADVANCED UNDERGRADUATES

VOTEC 249 INDEPENDENT STUDY.
PREREQUISITE--UPPER CLASSMAN, UPPER 5 PER CENT OF CLASS IN GRADE POINT AVERAGE, CONSENT OF ADVISER AND STAFF MEMBER WHO SUPERVISES THE WORK.
2 HOURS

14335	CONF	ARR	STAFF

VOTEC 291 THESIS.
PREREQUISITE--SENIOR STANDING.
2 HOURS

14343	CONF	ARR	STAFF

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

VOTEC 382 COOPERATIVE VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS.
2 TO 4 HOURS, OR 1/2 TO 1 UNIT
MEETS SECOND FOUR WEEKS.

14351	LECT-DISC	1-4	TUWTHF	28	EDUC	JOHNSON

VOTEC 384 THE GENERAL SHOP PROGRAM.
PREREQUISITE--SIXTEEN HOURS IN APPROPRIATE VOCATIONAL AND TECHNICAL EDUCATION COURSES.
4 HOURS OR 1 UNIT

14360	LAB	1-4	MTUWTHF	38	EDUC	TINKHAM

VOTEC 388 SPECIAL TECHNIQUES OF TEACHING VOCATIONAL INDUSTRIAL SUBJECTS.
PREREQUISITE--JUNIOR STANDING AND TEN HOURS OF UNDERGRADUATE CREDIT IN APPROPRIATE VOCATIONAL AND TECHNICAL EDUCATION COURSES.
4 HOURS OR 1 UNIT
MEETS FIRST FOUR WEEKS.

14378	LECT-DISC	10-12	TUWTHF	126	COM W	STOODLEY

VOTEC 442 JUNIOR COLLEGE.
1 UNIT

14386	LECT-DISC	8-10	W F	123	D K H		EPPERSON

VOTEC 449 INDEPENDENT STUDY.
*MAY BE REPEATED FOR A MAXIMUM OF TWO UNITS, OR MORE BY SPECIAL CONSENT OF THE DEAN.
*1/2 OR 1 UNIT

14394	CONF	ARR					GRADUATE STAFF

VOTEC 450 EVALUATION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

14408	LECT-DISC	8-11	TUWTHF	22	EDUC		SIMPSON

VOTEC 451 SUPERVISION IN HOME ECONOMICS EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS.

14416	LECT-DISC	1-4	TUWTHF	22	EDUC		MATHER

VOTEC 456 PROBLEMS AND TRENDS IN SPECIALIZED FIELDS OF VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT
*SECTION A IS FOR BUSINESS EDUCATION AND MEETS EIGHT WEEKS
*SECTION B IS FOR HOME ECON EDUCATION AND MEETS FIRST FOUR WEEKS
*SECTION C IS FOR IND. EDUCATION AND MEETS EIGHT WEEKS.

14424	LECT-DISC	*A	9	TUWTHF	15	D K H	MAHAFFEY
14432	LECT-DISC	*B	1-4	TUWTHF	25	EDUC	SPITZE
14441	LECT-DISC	*C	10	TUWTHF	382	EDUC	CAMPBELL

VOTEC 459 WORKSHOP IN CURRICULUM DEVELOPMENT.
1/2 TO 2 UNITS
*SECTION A IS FOR BUSINESS EDUCATION TEACHERS AND MEETS EIGHT WEEKS. STUDY OF THE BASIC CONCEPTS OF OFFICE AUTOMATION, ITS NATURE, FUNCTIONS, PROBLEMS AND TRENDS, WITH PARTICULAR REFERENCE TO CURRICULUM DEVELOPMENT. MODERN OFFICE EQUIPMENT IS AVAILABLE FOR STUDY AND PRACTICE. CONSENT OF INSTRUCTOR IS REQUIRED. 1 UNIT.
*SECTION B IS FOR BUSINESS EDUCATION TEACHERS AND MEETS EIGHT WEEKS. WORKSHOP IN BUSINESS EDUCATION FOR THE PURPOSE OF DEVELOPING AND UPDATING BUSINESS EDUCATION CURRICULA IN SECONDARY SCHOOLS AND JUNIOR COLLEGES. 1 UNIT.
*SECTION C IS FOR HOME ECONOMICS TEACHERS AND MEETS FIRST FOUR WEEKS. WORKSHOP IN HOME ECONOMICS AT POST-HIGH SCHOOL LEVEL, FOR PURPOSE OF HELPING DEVELOP PROGRAMS TO PREPARE FOR OCCUPATIONAL COMPETENCY IN HOME ECONOMICS RELATED OCCUPATIONS OF A TECHNICAL NATURE. 1 UNIT.
*SECTION D IS FOR TEACHERS AND MEETS EIGHT WEEKS. TEACHING IN-SCHOOL OCCUPATIONAL PROGRAMS FOR STUDENTS WITH SPECIAL NEEDS. 1/2 UNIT OR 1 UNIT.
*SECTION E IS FOR VOCATIONAL AND TECHNICAL TEACHERS AND MEETS EIGHT WEEKS. PRACTICUM IN DATA COLLECTION AND ANALYSIS FOR CURRICULUM DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION. 1 UNIT.
SECTION F IS FOR VOCATIONAL AGRICULTURE AND MEETS FIRST FOUR WEEKS. DESIGNED TO GIVE SPECIAL ATTENTION TO CURRICULUM PROBLEMS AND TO THE TEACHING OF COURSES FOR PERSONS PREPARING FOR GAINFUL EMPLOYMENT IN OFF-FARM AGRICULTURAL OCCUPATIONS. 1/2 UNIT.

14459	LECT-DISC	*A	8	TUWTHF	10	D K H	MELSON
14467	LECT-DISC	*B	10	TUWTHF	15	D K H	MELSON
14475	LECT-DISC	*C	8-11	TUWTHF	25	EDUC	WHITEFORD
14483	LECT-DISC	*D	8	TUWTHF	6	COM W	CAMPBELL
14491	LECT-DISC	*E	11-1	TUWTHF	36	COM W	SCHILL
14505	LECT-DISC	F	8-12	TUWTHF	28	EDUC	WALKER
		F	1-3	TUWTHF	28	EDUC	WALKER

VOTEC 471 POLICY AND PROGRAM DEVELOPMENT FOR EDUCATION IN AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277. OPEN TO SCHOOL ADMINISTRATORS AND EXTENSION EDUCATORS WITHOUT PREREQUISITES.
1/2 UNIT
MEETS FIRST FOUR WEEKS

14513	LECT-DISC	1-3	TUWTHF	33	EDUC		WARMBROD

VOTEC 472 COURSE PLANNING AND TEACHING PROCEDURES IN VOCATIONAL AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT
MEETS FIRST FOUR WEEKS

14521	LECT-DISC	8-10	TUWTHF	33	EDUC	FULLER

VOTEC 474 SUPERVISED AGRICULTURE IN VOCATIONAL AGRICULTURE.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT
MEETS FIRST FOUR WEEKS

14530	LECT-DISC	3-5	TUWTHF	33	EDUC	PHIPPS

VOTEC 475 ORGANIZING AND TEACHING AGRICULTURE MECHANICS.
PREREQUISITE--VO. TEC. 276 AND 277 OR CONSENT OF INSTRUCTOR.
1/2 UNIT
MEETS FIRST FOUR WEEKS

14548	LECT-DISC	10-12	TUWTHF	33	EDUC	EHRESMAN

VOTEC 488 CURRICULUM PROBLEMS AND TRENDS IN INDUSTRIAL EDUCATION.
PREREQUISITE--UNDERGRADUATE WORK IN VOCATIONAL AND TECHNICAL EDUCATION.
1 UNIT
MEETS SECOND FOUR WEEKS

14556	LECT-DISC	9-11	TUWTHF		51 E ARMOR	TOMLINSON

VOTEC 489 ADMINISTRATION AND SUPERVISION OF VOCATIONAL AND TECHNICAL EDUCATION.
PREREQUISITE--CONSENT OF INSTRUCTOR.
1 UNIT
MEETS FIRST FOUR WEEKS.

14564	LECT-DISC	9-11	TUWTHF	22	EDUC	KARNES

ZOOLOGY

DEPARTMENT OFFICE 287 MORRILL HALL

MAJOR-BIOL. 110-111 AND TWENTY HOURS IN ZOOLOGY, EXCLUDING ZOOL. 101, 104, 106, 107, BIOL. 110, 111, 151, D G S 131 AND 132, AND BIOL. 101 AND 102 AT CHICAGO UNDERGRADUATE DIVISION. STUDENTS WHO HAVE CREDIT IN ZOOL. 104 MUST TAKE BOTANY 100 TO SATISFY THE ELEMENTARY SEQUENCE REQUIREMENT. AT LEAST ONE COURSE MUST BE TAKEN IN EACH OF THE FOLLOWING AREA-GROUPS OF COURSES--

GENETICS AND DEVELOPMENT--ZOOL. 210, 333, 367
CELLULAR AND PHYSIOLOGICAL ZOOLOGY--ZOOL. 301, 302, 307, 308 312, 334
ECOLOGY AND BEHAVIOR--ZOOL. 342, 343, 345, 346, 369, 375
MORPHOLOGY AND SYSTEMATICS--ZOOL. 132, 304, 305, 318, 320, 321, 324, 332, 335, 336, 337, 338, 340, 344

BIOL. 203, 204, 251, 351, AND ALL 200-, 300-, AND 400-LEVEL ZOOLOGY COURSES, EVEN IF NOT INCLUDED IN THE PRECEDING AREA LISTS, AUTOMATICALLY COUNT TOWARD THE TWENTY HOURS. ALSO REQUIRED ARE ONE YEAR OF PHYSICS, AT LEAST 3 SEMESTERS OF CHEMISTRY INCLUDING ORGANIC, AND MATHEMATICS THROUGH ANALYTIC GEOMETRY WITH CALCULUS HIGHLY RECOMMENDED. ALSO HIGHLY RECOMMENDED IS ONE COURSE IN GENERAL BOTANY, MICROBIOLOGY, OR GEOLOGY. THESE REQUIREMENTS ARE EFFECTIVE FOR ALL UNDERGRADUATE STUDENTS ENTERING THE UNIVERSITY AFTER 1963.

MINORS--TWENTY HOURS IN ONE OR TWO OF THE FOLLOWING SUBJECTS, WITH AT LEAST EIGHT HOURS IN EACH IF TWO ARE CHOSEN--ANIMAL SCIENCE, TO BE CHOSEN FROM COURSES 100, 110, 230, 305 OR 330, ANTHROPOLOGY, BOTANY, CHEMISTRY, EDUCATION, ENTOMOLOGY, GEOGRAPHY, GEOLOGY, MATHEMATICS, MICROBIOLOGY, PHYSICS, PHYSIOLOGY, AND PSYCHOLOGY.

COURSES FOR UNDERGRADUATES

NOTE--D G S 131 AND 132 OR BIOL. 151 AND 251 MAY BE SUBSTITUTED FOR ZOOL. 101 OR 104 WHEREVER EITHER OF THE LATTER CONSTITUTES A PREREQUISITE.

BIOL. 110 AND 111, OR BIOL. 151 AND 251 MAY BE SUBSTITUTED FOR ZOOL. 101 WHEREVER IT CONSTITUTES A PREREQUISITE. D G S 131 AND 132 OR ZOOL. 104 MAY BE SUBSTITUTED WITH THE INSTRUCTORS PERMISSION.

ZOOL 104 ELEMENTARY ZOOLOGY.
*CREDIT IS NOT GIVEN IN ZOOL. 104 IN ADDITION TO CREDIT IN D. G. S. 131 OR 132.
*4 HOURS

14572	LECT		8	MTUWTH	254	ADMIN	HUBERT,
14581	LAB-DISC	A	9-12	MTUWTH	418	N H B	
14599	LAB-DISC	B	9-12	MTUWTH	422	N H B	UNDERHILL

ZOOL 107 EVOLUTION.
PREREQUISITE--SOPHOMORE STANDING.
3 HOURS

14602	DISC	10	MTUWTHF	140	BUR HALL	BADER, UNDERHILL

COURSES FOR ADVANCED UNDERGRADUATES

ZOOL 210 GENETICS.
SAME AS BOT. 210.
PREREQUISITE--BOT. 100 AND ZOOL. 101 OR CONSENT OF INSTRUCTOR.
4 HOURS

14611	LECT	2	MTUWTHF	140	BUR HALL	DAWSON
	LAB-DISC	3	MTUWTHF	102	H H	

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

ZOOL 302 EXPERIMENTAL ANIMAL PHYSIOLOGY.
SAME AS PHYSL. 302.
PREREQUISITE--ONE YEAR EACH OF COLLEGE LEVEL BIOLOGY, MATHEMATICS AND PHYSICS, CHEMISTRY THROUGH ORGANIC.
5 HOURS OR 1 UNIT

14629	LECT		8	MTUWTHF	140	BUR HALL	ANDERSON
14637	LAB	1	9-12	MTUW	523	BUR HALL	
14645	LAB	2	2-5	MTUW	523	BUR HALL	

ZOOL 303 INDIVIDUAL TOPICS.
PREREQUISITE--TWO YEARS OF ZOOLOGY, SENIOR STANDING, APPROVAL OF DEPARTMENT.
2 TO 5 HOURS, OR 1/2 OR 1 UNIT

14653	CONF	ARR	STAFF

ZOOL 304 FIELD AND SYSTEMATIC ZOOLOGY.
PREREQUISITE--ONE YEAR OF ZOOLOGY OR EQUIVALENT, SENIOR STANDING OR CONSENT OF INSTRUCTOR.
5 HOURS OR 1 UNIT

14661	LECT	11	MTUWTH	140	BUR HALL	MATTESON
	LAB	9-11	MTUWTH	420	N H B	

ZOOL 333 VERTEBRATE EMBRYOLOGY.
PREREQUISITE--ZOOL. 132.
5 HOURS OR 1 UNIT

14670	LECT	11	MTUWTH	136	BUR HALL	WATTERSON
	LAB-DISC	8-11	MTUWTH	323	N H B	SWEENEY

ZOOL 490 INDIVIDUAL RESEARCH.
FOR MASTERS DEGREE CANDIDATES WHO ELECT TO WRITE A RESEARCH REPORT RATHER THAN A THESIS.
PREREQUISITE--CONSENT OF ADVISER.
*NO MORE THAN 3 UNITS MAY BE INCLUDED IN THE MASTERS DEGREE PROGRAM.
*1/2 TO 3 UNITS

14688	CONF	ARR	STAFF

ZOOL 499 THESIS RESEARCH.
0 TO 2 UNITS

ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF VERTEBRATES--	
VERTEBRATE ANATOMY	H SMITH
ENDOCRINOLOGY	HALL, NALBANDOV
HISTOLOGY	DAVENPORT
ULTRASTRUCTURE	HALL
FUNCTIONAL ANATOMY	FRAZZETTA
VERTEBRATE PHYSIOLOGY	PROSSER
ANATOMY, PHYSIOLOGY, AND GENERAL CLASSIFICATION OF INVERTEBRATES--	
HELMINTHOLOGY	KRUIDENIER, SILVERMAN, LEVINE
INVERTEBRATE ZOOLOGY	MATTESON, SWEENEY
INVERTEBRATE PHYSIOLOGY	PROSSER, SWEENEY
PARASITOLOGY	KRIUDENIER, SILVERMAN ALGER
PROTOZOOLOGY	SMALL, LEVINE
EMBRYOLOGY AND BASIC KNOWLEDGE OF CELLS AND TISSUES--	
CYTOLOGY	DAVENPORT
EMBRYOLOGY AND REGENERATION	DAVENPORT, WATTERSON, FREEMAN
TOXICOLOGY	INGLE
PRINCIPLES OF ECOLOGY, PRINCIPLES OF TAXONOMY, NATURAL HISTORY--	
ECOLOGY	KENDEIGH, KING, WILLSON, GHENT
ETHOLOGY	BANKS
HERPETOLOGY	H SMITH
ICHTHYOLOGY	SHOEMAKER, P SMITH
LIMNOLOGY	MATTESON, BENNETT
MAMMALOGY	HOFFMEISTER, LEE
ORNITHOLOGY	KENDEIGH, WILLSON
WILDLIFE MANAGEMENT	KENDEIGH, SHOEMAKER, SANDERSON
GENETICS, PHYLOGENY, EVOLUTION--	
GENETICS AND EVLOUTION	KITZMILLER, NANNEY, BROWN, DAWSON
VERTEBRATE PHYOLGENY & PALEONTOLOGY	BADER, FRAZZETTA

14696	CONF	ARR	STAFF

TRIAL REGISTRATION FORM

Name.....
Last First Middle

Local
Address.....

Telephone.....

Date.....

College.....

Curriculum.....

Class.....

Subject	Type	Course Number	Section	Credit	CALL Number	M	Tu	W	Th	F	S	Memo

TRIAL REGISTRATION FORM

Name.....
Last First Middle

Local Address.....

Telephone.....

Date.....

College.....

Curriculum.....

Class.....

Subject	Type	Course Number	Section	Credit	CALL Number	M	Tu	W	Th	F	S	Memo

BOUND BY
HNM
10-94

UNIVERSITY OF ILLINOIS-URBANA
3 0112 111990476